

ISSUE: Certificate of Appropriateness for new construction

APPLICANT: Robert and Kathy Bunn

LOCATION: Parker-Gray District
1117 Queen Street

ZONE: CL/Commercial Low Zone

STAFF RECOMMENDATION

Staff notes the recommendations of Alexandria Archaeology and recommends approval of the Certificate of Appropriateness with the following conditions:

1. The applicant work with staff on final detailing of trim.

Minutes from the July 21, 2021, BAR Hearing:

BOARD ACTION: Deferred

By unanimous consent, the Board of Architectural Review accepted the request for deferral of BAR #2021-00235.

REASON

The Board provided feedback on the proposed design and asked the applicant to modify the design to address these comments and return to the Board with these modifications and additional exhibits as requested.

SPEAKERS

Matt Gray, the applicant, introduced the project and stated that he agreed with the staff recommendations.

Duncan Blair, attorney for the applicant, was available to answer any questions.

DISCUSSION

Ms. Neihardt questioned the format of the provided application materials and asked for more detailed drawings.

Ms. Irwin asked about the reason for the setback on the west side of the rear portion of the building. The applicant responded, indicating that this was done to create an ell form for the rear portion of the building, allowing for the expression of the side gable on the front portion of the building.

Ms. Irwin further inquired about the distance between the proposed structure and the neighboring building to the east of the property and how the east wall of the building would be built. The applicant responded that the setback on the east side of the property was a function

of the zoning requirements and was established during the BZA review of the case.

Mr. Adams agreed with the staff recommendation that the applicant work with staff to refine the details of the project. He stated that houses would typically have either a light in the door or a transom but not both. The applicant should decide which one he prefers and eliminate the other from the design. Mr. Adams stated that it was a handsome project and was in support of the application.

Mr. Spencer stated that the east elevation with the clipped gable gave the building an uncomfortable proportion, creating an asymmetrical form. He suggested that the applicant explore options to express the extent of the gable.

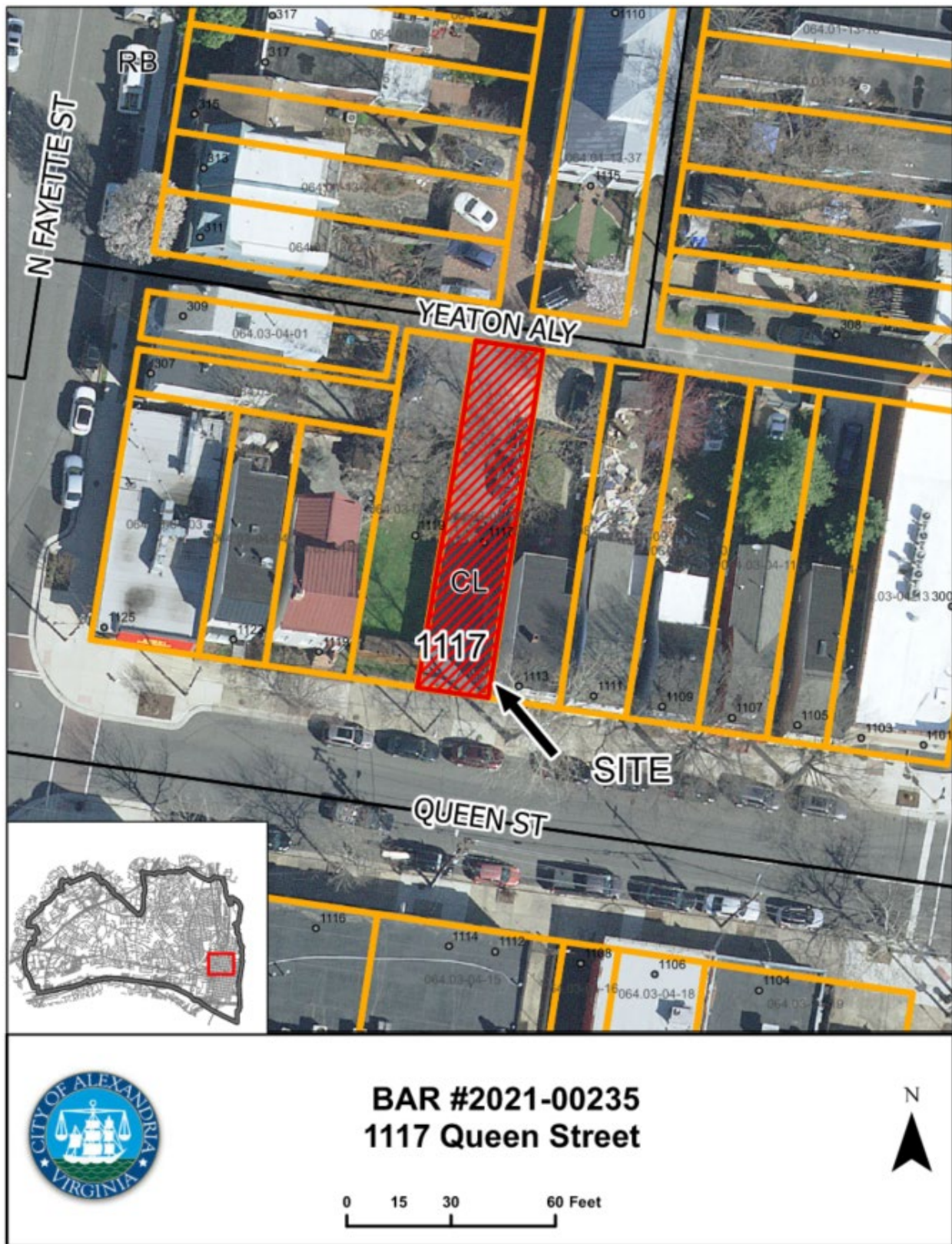
Ms. Irwin felt that the building was trying too hard to replicate an historic structure and that the use of an ell form was not appropriate because this form derived from the construction of building elements over time. She suggested that the applicant revise the form to align the west side of the building but maintain the expression of the full gable on both sides.

Mr. Adams suggested that the applicant consider using a gable roof form for the rear portion of the building that extends perpendicular to the gable on the front portion. This would allow for the massing to align while also expressing the side gable similar to a traditional design. He noted that this form exists on other properties on the block.

Ms. Roberts noted the provided comments on the proposed design and asked the applicant if he would like to request a deferral of the case to allow him an opportunity to address these comments.

GENERAL NOTES TO THE APPLICANT

1. **APPEAL OF DECISION:** In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. **COMPLIANCE WITH BAR POLICIES:** All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. **BUILDING PERMITS:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. **ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH:** Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
5. **EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. **HISTORIC PROPERTY TAX CREDITS:** Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



Update

The case was deferred at the July 21, 2021, hearing to allow the applicant to make design changes to address comments from the Board. The applicant has included a memo in response to Board comments in this application. Specific comments from the BAR included the following:

1. Reconsider the use of an ell form for the rear of the building
2. Explore the use of a gable roof form for the rear portion of the building
3. Eliminate either the transom above the front door or the lites in the door

After the BAR hearing, the project returned to the BZA (BZA #2021-00012) for a modification of their previous approval to modify the building footprint. With this approval, the applicant returns to the BAR with a revised design, requesting a Certificate of Appropriateness.

I. APPLICANT'S PROPOSAL

The applicant requests a Certificate of Appropriateness to construct a new detached townhouse dwelling at 1117 Queen Street. The townhouse will consist of a two story plus loft, asymmetrical, side gable form that is set back approximately 7 feet from the front property line, similar to the existing structure at 1121 Queen Street.

The proposed construction materials include thin brick on the structural foundation, fiber cement siding and trim, aluminum clad wood windows, fiberglass front door, aluminum clad wood rear door, and a standing seam metal roof. A six foot wood fence is proposed to be constructed at the north, east, and west sides of the lot. The Board should note that per the zoning comments, the fence being proposed at the east property line where it is adjacent to the neighboring structure does not comply with the zoning ordinance and will not be allowed.

Site context

The proposed townhouse faces Queen Street and the alley to the rear of the property is public. The north and south elevations will be visible from a public way. The east wall will be approximately 1'-6" from the neighboring structure, making any visibility of this wall extremely limited. The west wall will also be 1'-6" from the property line but the vacant lot on this side will allow some view of this elevation. The presence of fencing surrounding the neighboring property will make this visibility somewhat limited (Figure 1).



Figure 1: View of front of proposed townhouse showing visibility from public right of way

II. HISTORY

A structure first appears on the project site on the 1891 Sanborn Map. At that time there was a two story, frame dwelling with no rear addition at the front of the site and an outbuilding at the rear of the lot that is labeled a 1 ½ story dwelling. By 1907, a one story rear addition has been added to the two story frame dwelling and a two story shed is shown at the north west corner of the lot. The Sanborn Maps do not show any further change in the structures after this time. In 1943, Permit #4845 was issued to the owner to install siding on the residential dwelling. In 1946, Permit #7111 was issued to the owner for the installation of interior partitions but the use of the structure was described as a “residence and cab office.” In 1985, Permit #1675 was issued for the demolition of a two story frame residence on the site. In 1986, BAR #86-27PG was approved for the installation of fencing at the rear parking area on the otherwise vacant lot at 1117 Queen Street. The lot has remained vacant since that time.

III. ANALYSIS

Pursuant to section 3-706(A)(2) of the zoning ordinance, a front building line of new dwellings in the RB zone must be the same as the front lot line, “or such other line consistent with the character of the district that the Board of Architectural Review approves.” Buildings on the eastern half of this block are located on the front property line. The buildings at 1121 and 1123 Queen Street are located approximately 7 feet from the front property line. The new townhouse at 1117 Queen Street will be in alignment with these properties. As shown on the Sanborn Maps, the original building on this lot sat such that the front aligned with the building at 1121 Queen Street. Staff supports this location, as the proposed design is more in keeping with the buildings to the west of the project site and this setback will allow for a comfortable relationship to the narrow sidewalk. It also recreates the historic siting for the property.

As the BAR’s *Design Guidelines* chapter on New Residential Construction notes, the Board is most concerned with the compatibility of new structures with adjacent and nearby historic buildings. Zoning ordinance sec. 10-205(A) requires compatibility “with other buildings or structures on the same block face, the block face across the public street, or the immediate surrounding area.” Historically, the Board has supported new but contextual background buildings which “allow historic structures to maintain the primary visual importance.” The *Guidelines* specifically state that “...the Boards seek to promote compatible development that is, at once, both responsive to the needs and tastes of the late 20th century while still being compatible with the historic character of the districts.” In evaluating the compatibility of new construction, the Board generally focuses on height, scale, mass, and architectural character, while also reviewing material selection, fenestration, and architectural detailing on a more micro level.

Update

In response to Board comments, the applicant has made several revisions to the proposed design. These revisions include the following items:

1. Revised the overall depth of the building from 35'-6" to 40'
2. Eliminated the ell form and extended the rear roof slope at an angle more shallow than the front roof slope.
3. Eliminated the transom over the front door and changed the height of the door to align with the heads of the windows.
4. Enlarged the front entry stoop and added simple railings to either side of the stoop.
5. Added a conductor head and downspout to the rear elevation to provide drainage for the roof deck.

In staff's opinion, the proposed new townhouse is consistent with the recommendations contained in the *Design Guidelines* for residential new construction. As evidenced by the existing townhouses on this block, a combination of attached and detached structures along a blockface is commonly found throughout the historic district. This block does not have pairs of identical buildings but there are many architectural elements that can be found consistently throughout the existing buildings. The introduction of a new single townhouse of a similar size, massing, and relationship to the sidewalk as those found elsewhere on the block is compatible with the historic context (Figure 2). The commercial and religious buildings on the opposite side of Queen Street, while lovely, represent a later architectural style and scale than the nearby historic single family residential buildings.



Figure 2: Photomontage showing proposed structure in existing blockface

Stylistically, the proposed townhouse is similar to others found in the immediate vicinity. The simple organization of the three window bays is found on other buildings of varying styles on this and other nearby blocks. Consistent with historic townhouses, the windows are in alignment vertically and reduce in height on both the front and rear elevations from the first floor to the upper level (Figure 3 - 6).

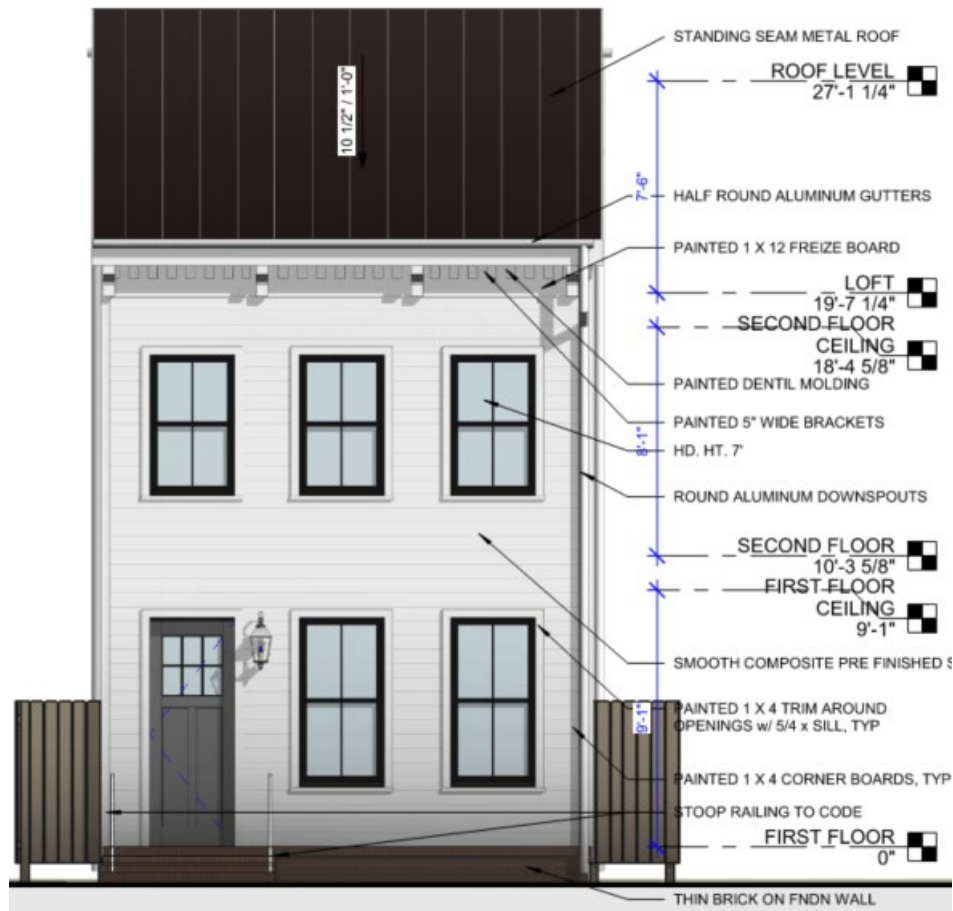


Figure 3: Revised South elevation of proposed townhouse

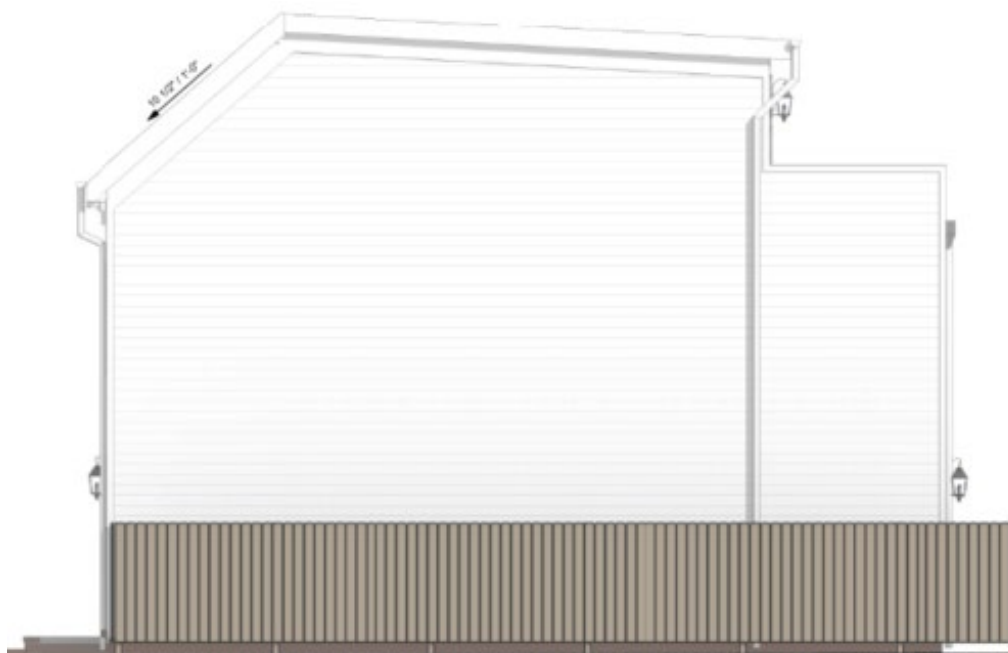


Figure 4: Revised East elevation of proposed townhouse



Figure 5: Revised North elevation of proposed structure

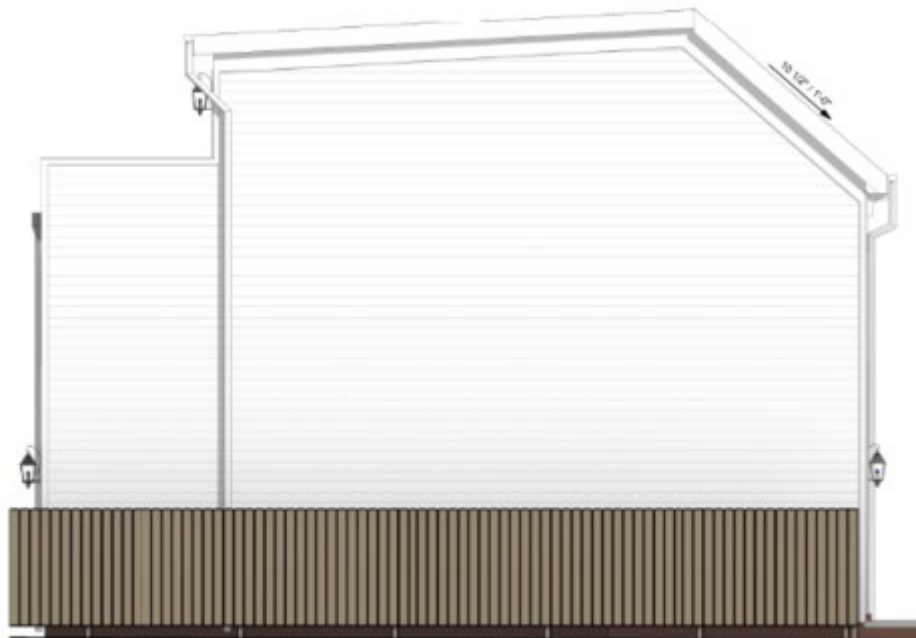


Figure 6: Revised West elevation of proposed structure

Staff finds the size and scale of the townhouses to be appropriate and not overwhelming in relation to nearby historic properties. The buildings on both sides of this block include a range of different types and sizes, including commercial buildings at the east and west ends of this side of the block. The proposed building is similar in height and massing to the single-family residential buildings nearby and is smaller than the commercial buildings. The use of modern materials, such as fiber cement lap siding and aluminum clad wood windows, along with a simplification of historic details, clearly differentiates the proposed new construction from historic properties and as a successful background building. With regard to the architectural features of the proposed townhouse, the trim as shown in the provided renderings should be further refined to be historically appropriate and compatible with the nearby historic buildings. For instance, the trim at the windows is shown without joints at the top and the trim around the door lacks a similar level of detail. The fascia, dentils, and brackets are appropriate elements for this style of house but require some additional detailing in order to make the overall proportions correct. The renderings as shown are also somewhat misleading in that they do not show the correct depth at the windows and door, leading to an overall flat impression that would not exist in the built form. Staff recommends that the applicant work with staff during the permit drawing phase to finetune these details.

As the Board is aware, the Parker-Gray Residential Reference Guide (RRG) does not require BAR review or staff review for several building features. Staff notes that the door, stoop, steps and handrails on the façade, and rear decks less than 2' above grade do not require BAR or staff review. However, the applicant has worked with staff through several iterations of the building design and these features are architecturally appropriate for the proposed townhouse.

Staff finds that the proposed design revisions successfully address the comments provided by the Board at the previous hearing and are an overall improvement in the design. With these revisions, staff finds that the proposed design meets the Zoning Ordinance criteria that the building be compatible with other buildings or structures on the same block face and the immediate surrounding area and recommends that the Board approves the Certificate of Appropriateness with the following conditions:

1. The applicant work with staff on final detailing of trim.

STAFF

William Conkey, AIA, Historic Preservation Architect, Planning & Zoning
Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning

F-1 The Board of Zoning Appeals granted variances on April 12, 2021 for lot size, lot frontage, front yard setback, and side yard setbacks. The front yard setback variance

- allows for a 7-foot setback from the front property line and the side yard setback variances allow for a 1.5-foot setback from the side property lines.
- F-2 The Board of Zoning Appeals granted more variances on October 18, 2021 for 1.5-foot side yard setbacks to accommodate an increase in the footprint by 4.5 feet and for an increase in height for a portion of the third floor.
- F-3 A proposed plat was not submitted with the application. A revised plat matching the drawings and the BZA2021-00012 application must be submitted when applying for a building permit.
- F-4 The proposal shows a fence along the building on both the east and west sides. A condition of BZA2021-00012 states that the 1.5 feet between the building and its property line to the east remain unobstructed for the length of the building to the east, therefore, the portion of the proposed fence that is located along the east side of the building is not allowed and does not comply with zoning.
- F-5 The proposed new dwelling complies with the variances approved by BZA2021-00002 and BZA2021-00012 and complies with zoning.

Code Administration

- C-1 A building permit and plan review are required prior to the start of construction.

Transportation and Environmental Services

- R-1 An approved GRADING PLAN must be attached to the building permit application. City Code Section 8-1-22(d) requires that a grading plan be submitted to and approved by T&ES prior to the issuance of building permits for improvements involving:
- the construction of a new home;
 - construction of an addition to an existing home where either
 - the addition exceeds the area of the existing building footprint by 100% or more;
 - or, the construction of the addition results in less than 50% of the existing first floor exterior walls, in their entirety, remaining;
 - changes to existing grade elevation of 1-foot or greater;
 - changes to existing drainage patterns;
 - land disturbance of 2,500 square feet or greater.
- Questions regarding the processing of grading plans should be directed to the T&ES Site Plan Coordinator at (703) 746-4064. Memorandum to Industry No. 02-08 was issued on April 28, 2008 and can be viewed online via the following link.
<http://alexandriava.gov/uploadedFiles/tes/info/gradingPlanRequirements.pdf>
- R-2 The building permit plans shall comply with requirements of City Code Section 8-1-22 regarding the location of downspouts, foundation drains and sump pumps. Refer to Memorandum to Industry dated June 18, 2004. [Memorandum is available online at the City web site under Transportation\Engineering and Design\Memos to Industry.]. (T&ES)
- R-3 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)

- R-4 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (T&ES)
- R-5 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the grading plan. (T&ES)
- R-6 An erosion and sediment control plan must be approved by T&ES prior to any land disturbing activity greater than 2500 square feet. An erosion and sediment control bond shall be posted prior to release of the grading plan. (T&ES)
- R-7 If construction of the residential unit(s) results in land disturbing activity in excess of 2500 square feet, the applicant is required to comply with the provisions of Article XIII of the City's Zoning Ordinance for stormwater quality control. (T&ES)
- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99).
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line.
- C-3 Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.8-1-22)
- C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3)
- C-5 Pay sanitary sewer tap fee prior to release of Grading Plan. (Sec. 5-6-25)
- C-6 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-3-61)

Alexandria Archaeology

- F-1 Historic maps indicate that a dwelling stood at 1117 Queen St. by the mid-nineteenth century. By the 1960s the building was no longer standing and the lot has remained vacant since. The property may contain significant archaeological evidence about the growth and development of Alexandria in the second half of the nineteenth century.
- R-1 The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or

concentrations of artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.

- R-2 The applicant/developer shall not allow any metal detection to be conducted on the property, unless authorized by Alexandria Archaeology.
- R-3 The statements in archaeology conditions above marked with an asterisk “*” shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including Basement/Foundation Plans, Demolition, Erosion and Sediment Control, Grading, Landscaping, Utilities, and Sheeting and Shoring) so that on-site contractors are aware of the requirements.

V. ATTACHMENTS

- 1 – Application Materials*
2 – Supplemental Materials
3 – [July 21, 2021 BAR Staff Report BAR #2021-00235](#)

ADDRESS OF PROJECT: 1117 Queen Street, Alexandria, Virginia, 22314DISTRICT: ☐ Old & Historic Alexandria ☒ Parker – Gray ☐ 100 Year Old BuildingTAX MAP AND PARCEL: 064.03-04-07 ZONING: CLAPPLICATION FOR: *(Please check all that apply)*☒ CERTIFICATE OF APPROPRIATENESS☐ PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)☐ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION
CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)☐ WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)**Contract purchaser**Applicant: ☒ Property Owner ☐ Business *(Please provide business name & contact person)*Name: Matthew & Erica GrayAddress: 225 North West StretCity: Alexandria State: VA Zip: 22314Phone: 571-405-7671 E-mail: mgray@msg.propertiesAuthorized Agent *(if applicable)*: ☐ Attorney ☐ Architect ☐ _____

Name: _____ Phone: _____

E-mail: _____

Legal Property Owner:Name: Robert & Kathy BunnAddress: 3615 Old Forest RoadCity: Lynchburg State: VA Zip: 24501

Phone: _____ E-mail: _____

- ☐ Yes ☒ No Is there an historic preservation easement on this property?
- ☐ Yes ☐ No If yes, has the easement holder agreed to the proposed alterations?
- ☐ Yes ☒ No Is there a homeowner's association for this property?
- ☐ Yes ☐ No If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

NATURE OF PROPOSED WORK: *Please check all that apply*

- ☒ **NEW CONSTRUCTION**
☐ **EXTERIOR ALTERATION:** *Please check all that apply.*
 ☐ awning ☐ fence, gate or garden wall ☐ HVAC equipment ☐ shutters
 ☐ doors ☐ windows ☐ siding ☐ shed
 ☐ lighting ☐ pergola/trellis ☐ painting unpainted masonry
 ☐ other _____
☐ **ADDITION**
☐ **DEMOLITION/ENCAPSULATION**
☐ **SIGNAGE**

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

New construction of a single family dwelling.

SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- N/A
- ☐ ☐ Survey plat showing the extent of the proposed demolition/encapsulation.
☐ ☐ Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
☐ ☐ Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
☐ ☐ Description of the reason for demolition/encapsulation.
☐ ☐ Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

Additions & New Construction: *Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. Check N/A if an item in this section does not apply to your project.*

- ☒ ☐ ^{N/A} Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- ☒ ☐ FAR & Open Space calculation form.
- ☒ ☐ Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- ☐ ☒ Existing elevations must be scaled and include dimensions.
- ☒ ☐ Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- ☒ ☐ Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- ☒ ☐ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☒ For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: *One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.*

- ☐ ☐ ^{N/A} Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
- ☐ ☐ Square feet of existing signs to remain: _____.
- ☐ ☐ Photograph of building showing existing conditions.
- ☐ ☐ Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- ☐ ☐ Location of sign (show exact location on building including the height above sidewalk).
- ☐ ☐ Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- ☐ ☐ Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: *Check N/A if an item in this section does not apply to your project.*

- ☐ ☐ ^{N/A} Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- ☐ ☐ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☐ Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- ☐ ☐ An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- ☐ ☐ Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

- ☒ I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- ☒ I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- ☒ I, the applicant, or an authorized representative will be present at the public hearing.
- ☒ I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:Signature:  _____Printed Name: Matt Gray & Erica GrayDate: 10/25/2021

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Matt & Erica Gray	225 N. West Street, Alexandria, VA 22314	100%
2.		
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 1117 Queen Street (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Robert & Kathy Bunn	3615 Old Forest Rd, Lynchburg, VA 24501	100%
2.		
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. Matt & Erica Gray	None	None
2. Robert & Kathy Bunn	None	None
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

10/25/2021

Date

Matt & Erica Gray

Printed Name


Signature



Department of Planning and Zoning

Floor Area Ratio and Open Space Calculations

as of 12/20/18

B

A. Property Information

A1. 1117 Queen Street, Alexandria, Virginia, 22314 CL
Street Address Zone

A2. 2000.0 x 0.75 = 1500.0
Total Lot Area Floor Area Ratio Allowed by Zone Maximum Allowable Floor Area

B. Existing Gross Floor Area

Existing Gross Area		Allowable Exclusions**		
Basement		Basement**		B1. 0.00 Sq. Ft.
First Floor		Stairways**		Existing Gross Floor Area*
Second Floor		Mechanical**		B2. 0.00 Sq. Ft.
Third Floor		Attic less than 7'***		Allowable Floor Exclusions**
Attic		Porches**		B3. 0.00 Sq. Ft.
Porches		Balcony/Deck**		Existing Floor Area Minus Exclusions
Balcony/Deck		Lavatory***		(subtract B2 from B1)
Lavatory***		Other**		Comments for Existing Gross Floor Area
Other**		Other**		
B1. Total Gross	0.00	B2. Total Exclusions	0.00	Vacant land.

C. Proposed Gross Floor Area

Proposed Gross Area		Allowable Exclusions**		
Basement	0	Basement**		C1. 1902.0 Sq. Ft.
First Floor	680.0	Stairways**	102.0	Proposed Gross Floor Area*
Second Floor	680.0	Mechanical**	70.0	C2. 428.0 Sq. Ft.
Third Floor	542.0	Attic less than 7'***	85.0	Allowable Floor Exclusions**
Attic		Porches**		C3. 1474.0 Sq. Ft.
Porches		Balcony/Deck**		Proposed Floor Area Minus Exclusions
Balcony/Deck		Lavatory***	171.0	(subtract C2 from C1)
Lavatory***		Other**		
Other		Other**		
C1. Total Gross	1902.0	C2. Total Exclusions	428.0	

D. Total Floor Area

D1. 1474.0 Sq. Ft.
Total Floor Area (add B3 and C3)

D2. 1500.0 Sq. Ft.
Total Floor Area Allowed by Zone (A2)

E. Open Space

E1. 2000.0 Sq. Ft.
Existing Open Space

E2. 800.0 Sq. Ft.
Required Open Space

E3. 888.0 Sq. Ft.
Proposed Open Space

Notes

*Gross floor area is the sum of all areas under roof of a lot, measured from the face of exterior walls, including basements, garages, sheds, gazebos, guest buildings and other accessory buildings.

** Refer to the Zoning Ordinance (Section 2-145(B)) and consult with Zoning Staff for information regarding allowable exclusions. Sections may also be required for some exclusions.

***Lavatories may be excluded up to a maximum of 50 square feet, per lavatory. The maximum total of excludable area for lavatories shall be no greater than 10% of gross floor area.

The undersigned hereby certifies and attests that, to the best of his/her knowledge, the above computations are true and correct.

Signature: _____

W. H. H. H.

Chris Jones

Date: _____

10/25/2021

ALEXANDRIA BOARD OF ARCHITECTURAL REVIEW

Sent via E-mail

October 22nd, 2021

Board Members
301 King Street, Room 2100
Alexandria VA 22314

Re: 1117 Queen Street, Alexandria, Virginia 22314

On July 21st, 2021 the applicant proposed the construction of a new single family dwelling under case BAR #2021-00235 PG. The Board presented various comments to the applicant which we would like to address today.

COMMENT #1: The shape of the proposed house was not looked upon favorably.

APPLICANT RESPONSE: We have created a rectangular building and eliminated the previously proposed shape.

COMMENT #2: The fence is drawn on the property line which only allows 1 ½ feet from the house to the fence.

APPLICANT RESPONSE: Now that the BZA has approved the new building footprint, we are actively talking with our two neighbors. The neighbor to the west has agreed to allow us to connect our fence to theirs and will provide that authority to the Board. This will create one uniform fence line and eliminate the 1 ½ foot issue. Each neighbor will share that space, thus creating 3' for maintenance.

We are currently trying to contact the neighbor to the east. If we can not get them to agree, we will eliminate the fence prior to the December 1st hearing.

COMMENT #3: The roofline on the east creates a very odd connection where the two roofs come together.

APPLICANT RESPONSE: The two different roof lines that were previously proposed have been eliminated. Please see new roofline drawings.

COMMENT #4: Explore making the gable roof and shed dormer connect at the same elevation.

APPLICANT RESPONSE: The two different roof lines that were previously proposed have been eliminated. Please see new roofline drawings.

COMMENT #5: Explore using a gable on the rear roof instead of the shed dormer.

APPLICANT RESPONSE: The reverse gable was explored but it was pushing the roof line above the front roof. It was requested that we lower the front roof to the new elevation, and adding the reverse gable increased the height.

Additionally, we were losing head height with the reverse gable.

Although we explored this option, we did not find it feasible and created a simplified roof system.

COMMENT #6: Clarify roofline and trim details.

APPLICANT RESPONSE: The roofline has completely changed and thus these details have been simplified. Please see new drawings.

Additionally, we realize that at the top of the gable there is a “notch” where it connects to the rear roof. This is a software constraint. This will be one uniform system. We can submit roof truss drawings with additional details if the Board finds this roof system acceptable.

COMMENT #7: The front door currently has a belt and suspender issue.

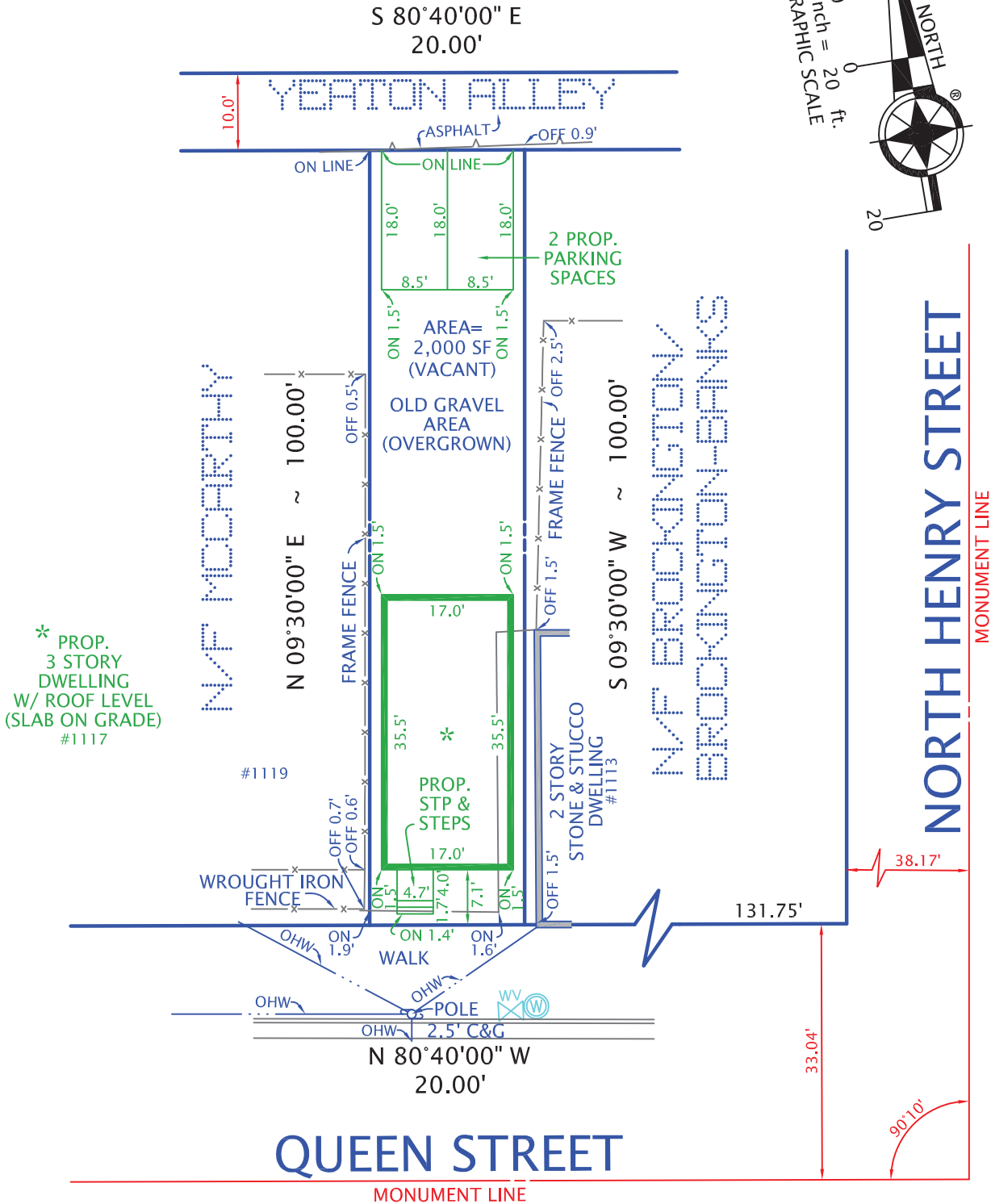
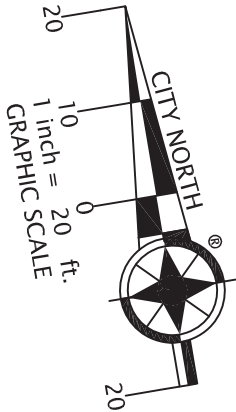
APPLICANT RESPONSE: The transom has been removed and the 6 light door will remain.

Please let us know if there are any questions or clarifications needed. We appreciate and look forward to hearing from you.

Respectfully,

Erica & Matthew Gray
Contract Purchaser's of 1117 Queen Street

NOTES: 1. THIS IS A CONCEPTUAL SKETCH AND DOES NOT SHOW PRELIMINARY ENGINEERING.



PLAT
SHOWING HOUSE LOCATION ON
THE PROPERTY LOCATED AT
#1117 QUEEN STREET

(INSTRUMENT NO. 070013083)

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1" = 20'

JANUARY 19, 2021

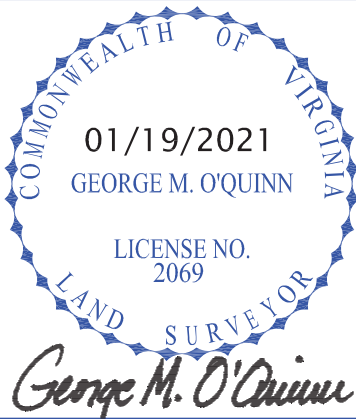
FEBRUARY 01, 2021 (PROP. DWELLING)

I HEREBY CERTIFY THAT THE POSITIONS OF ALL THE EXISTING IMPROVEMENTS HAVE BEEN CAREFULLY ESTABLISHED BY A CURRENT FIELD SURVEY AND UNLESS SHOWN THERE ARE NO VISIBLE ENCROACHMENTS AS OF THIS DATE:

THIS PLAT IS SUBJECT TO RESTRICTIONS OF RECORD.

A TITLE REPORT WAS NOT FURNISHED.

NO CORNER MARKERS SET.



CASE NAME:

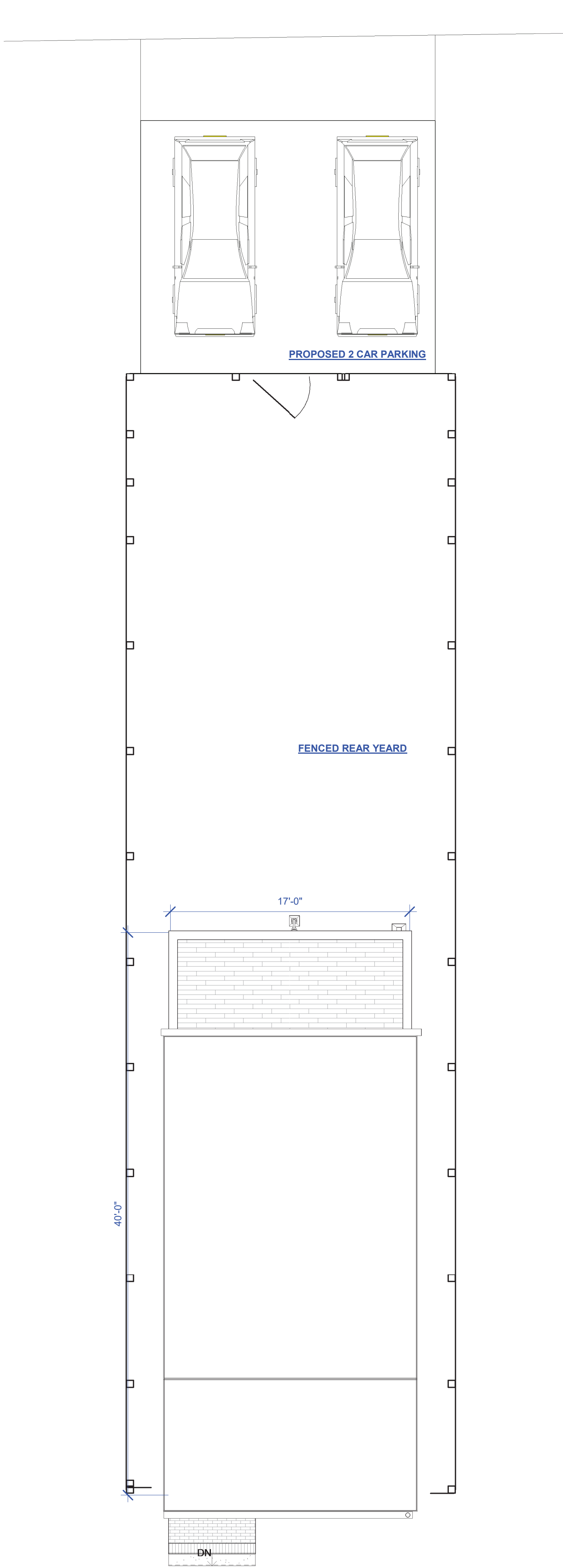
BUNN
MATT GRAY



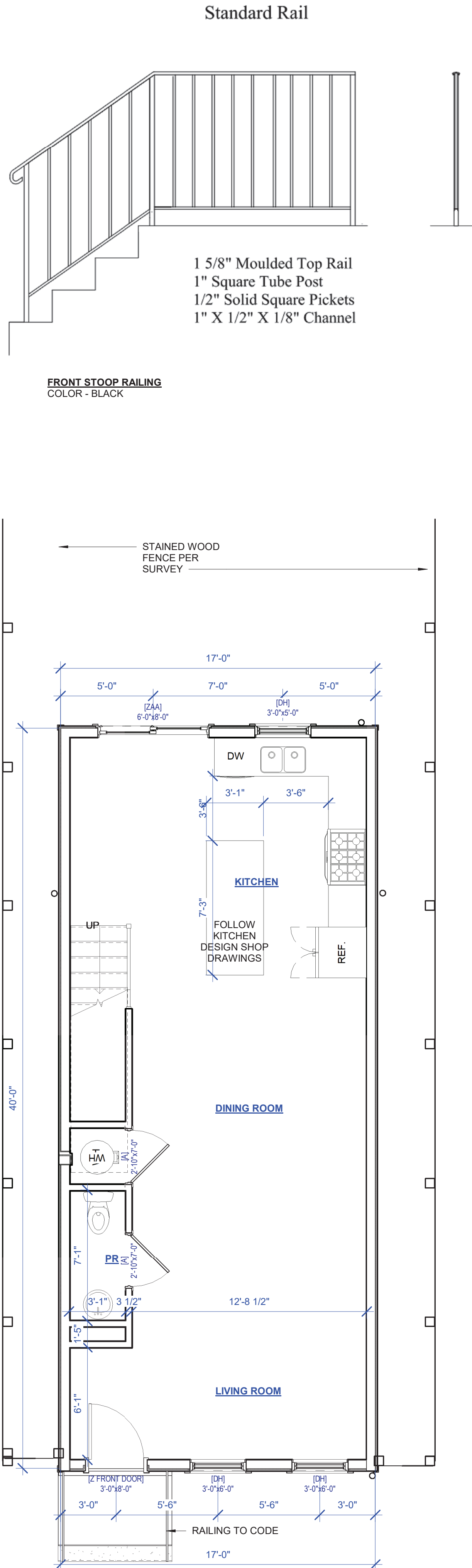
DOMINION

Surveyors
Inc.®

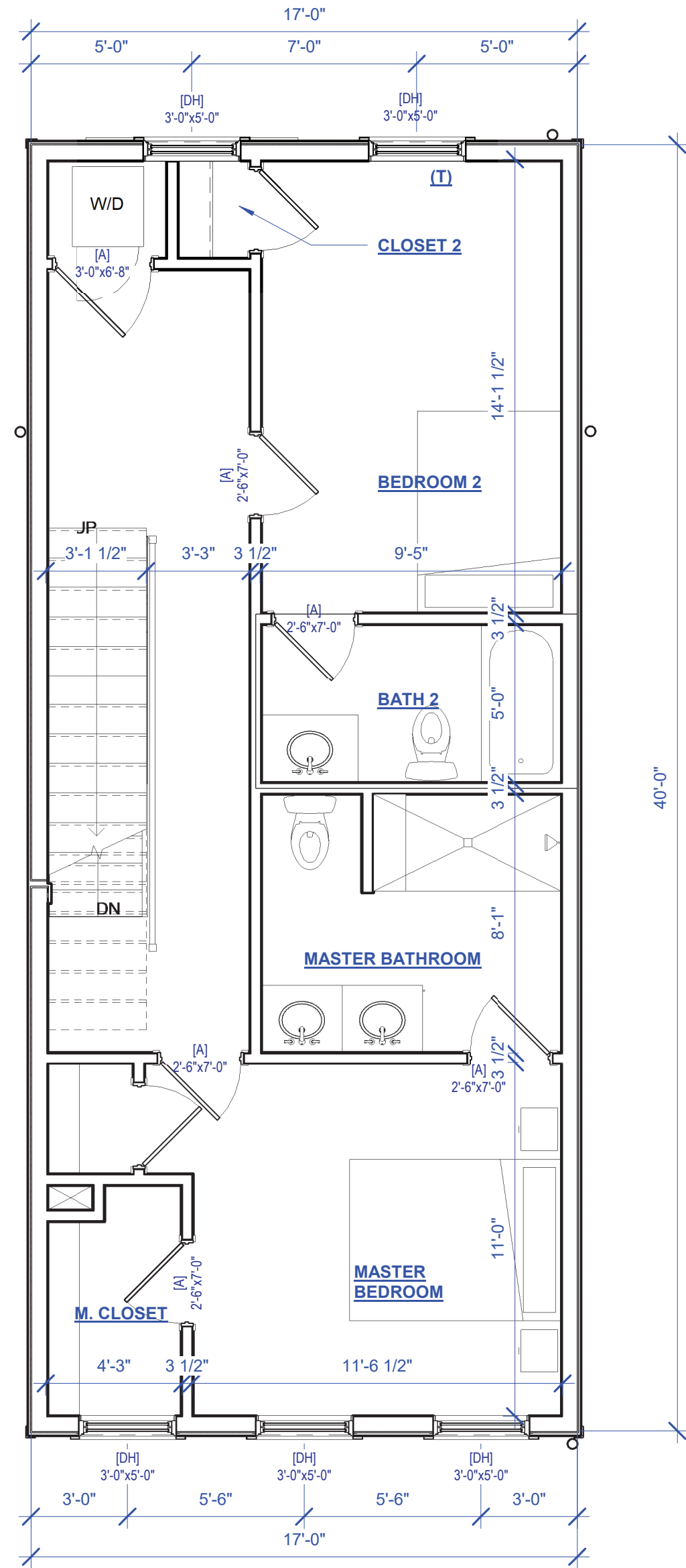
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX: 703-799-6412



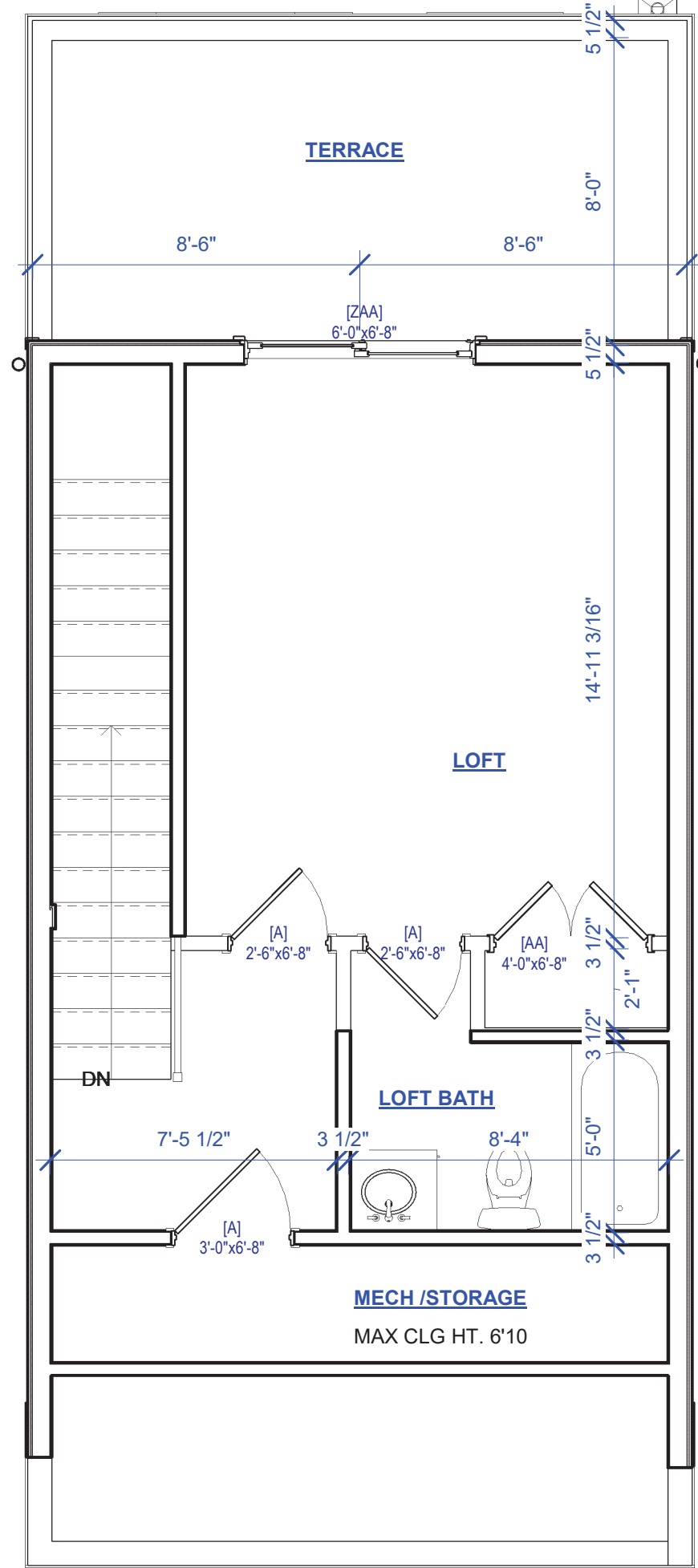
1 SITE PLAN
A101 3/16" = 1'-0"



2 FIRST FLOOR PLAN
A101 1/4" = 1'-0"

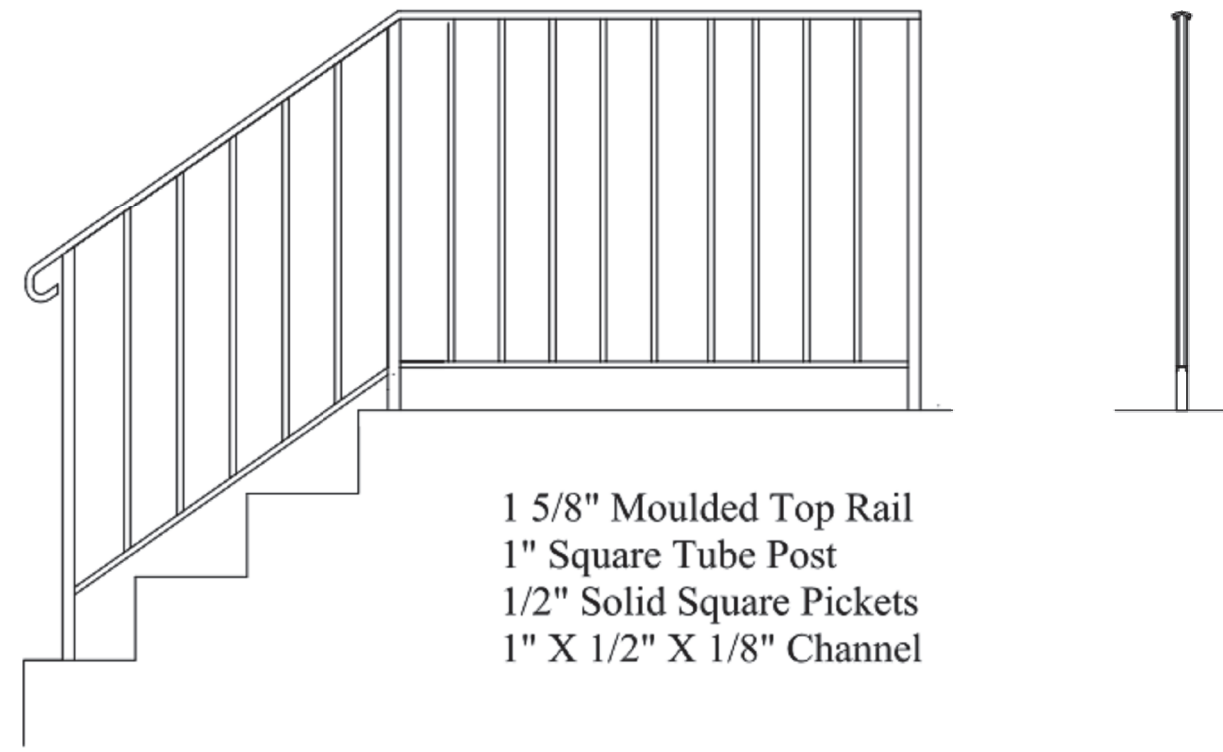


3 SECOND FLOOR PLAN
A101 1/4" = 1'-0"



4 LOFT
A101 1/4" = 1'-0"

Standard Rail

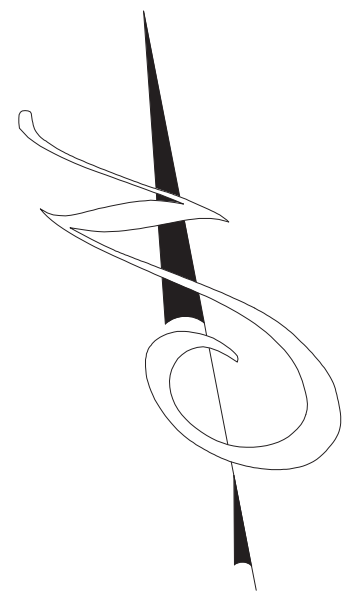


FRONT STOOP RAILING
COLOR - BLACK

GARAGE NOTES			
A. (1) LAYER OF 5/8" RATED GWB ALL WALLS AND STRUCTURAL ELEMENTS & (1) LAYER OF 5/8" RATED GWB @ CEILING. B. PROVIDE RATED WALLS AND CEILINGS TO ADJACENT LIVING SPACES			
ENERGY CONSERVATION AND REQUIRED INSULATION VALUES PER IRC			
ELEMENT	R-VALUE	U-VALUE	SHGC
WINDOWS/DOORS		0.30	0.35
CEILING	R-38		
WALLS (2X6 WOOD)	R-19		
WALLS (CONCRETE)	R-13		
FLOORS	R-19		
CANTILEVER FLOORS*	R-30		
*TO EXTERIOR & UNCONDITIONED SPACE, SPRAY FOAM CLOSED CELL FOAM			
LEGEND			
(T) *T INDICATES TEMPERED GLASS IN DOOR OR WINDOW.			

NOTE: REFER TO WIND BRACING & DETAILS FOR WIND BRACING AND REQUIRED COMPONENTS

GENERAL NOTES			
A. ALL EXTERIOR FRAMED WALLS TO BE 2X6 STUDS @ 16" O.C U.N.O. B. ALL BEARING INTERIOR WALLS 2 X 6 @ 16" O.C. UNO C. ALL INTERIOR FRAMED WALLS TO BE 2X4 STUDS @ 16" O.C U.N.O. D. ALL BEARING WALLS TO BE 16" O.C AND DBL TOP PLATES U.N.O. E. ALL INTERIOR FRAMED WALLS W/ CASE OR POCKET DOORS TO BE 2X6 STUDS U.N.O. F. ALL FOUNDATION WALLS TO SIZED PER STRUCTURAL PLANS. G. ALL LUMBER EXPOSED TO THE ELEMENTS TO BE PRESSURE TREATED. H. ALL DIMENSIONS ARE TO ROUGH STUDS U.N.O. I. NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH PLANS & SITE CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK. J. ALL EXTERIOR DOOR AND WINDOW ARE SHOWN ARE GENERIC AND MUST BE COORDINATED BY THE GENERAL CONTRACTOR AND MANUFACTURE SPECIFICATIONS. K. ALL 2X FRAME WALLS ADJACENT TO CONC. WALLS TO HAVE PT. SILLS PLATES AND ARE TO BE SET 1/2" OFF OF CONC WALL. L. ALL RAILING TO BE INSTALLED PER IRC SECTION R311.5.6 M. EXTERIOR HOSE BIBS (HB) ARE TO BE FROST PROOF N. U.N.O. HEAD HEIGHT FOR ALL EXTERIOR WINDOWS 8'0" @ 1ST FLOOR & 2ND FLOOR AND 6'8" IN BASEMENT O. FOR ROUGH OPENINGS REFER TO DOOR WINDOW MANUFACTURER SPECS P. ALL 1ST FLOOR INTERIOR DOORS 8' TALL, BASEMENT AND 2ND FLOOR ARE 6'8" TALL. Q. UNO, FOLLOW MANUFACTURER'S GUIDELINES FOR TEMPERED GLASS IN WINDOWS R. ALL FINISHED AREAS OF BASEMENT TO RECEIVE R-15 BATT INSULATION IN EXTERIOR WALLS S. UNFINISHED AREAS TO RECEIVE FOIL FACED R-15 BATTS T. WATER PROOF WALLS MIN 6" ABOVE GRADE UNO, PARGE WALLS MIN 12" BELOW GRADE, TYP			



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(703)420-8141
www.S2RArchitects.com
JD@S2RArchitects.com

PROJECT NAME AND ADDRESS

NEW SINGLE FAMILY HOME
1117 QUEEN STREET
CITY OF ALEXANDRIA VA

PROJECT #

J21007

SHEET TITLE

FIRST SECOND AND LOFT FLOOR PLAN

SHEET #

A101

REVISION

DATE

11/15/21

11/19/2021 4:45:58 PM

EXTERIOR RAILING REAR:-

SIDING AND SOFFIT :-

MANUFACTURER:

HARDIPLANK LAP SIDING
- SMOOTH
- THICKNESS 0.312"
- WIDTH, 5" REVEAL
- COLOR ARCTIC WHITE OR SIM.

TRIM :-

MANUFACTURER:

AZEK EXTERIORS OR SIM.
- PAINTED TO MTACH SIDING
- 1 X 4 @ BUILDING CORNERS AND HEADERS AND JAMS
OF WINDOWS
- 5/4 BOARD AT WINDOW SILLS

ROOF SCHEDULE:-

MANUFACTURER:

ABC AMERICAN BUILDING COMPONENTS OR SIM.

SPECIFICATIONS:

5V CRIMP PANELS
SIGNATURE 200
- 29 GAUGE STEEL
- GALVALUME PLUS COATING

COLOR: COAL BLACK OR SIM.

GUTTER & DOWNSPOUT SCHEDULE:-

SPECIFICATIONS GUTTERS:

ALUMINIUM HALF ROUND REVERSE BEAD GUTTERS W/
HIDDEN HANGER BRACKETS
- COLOR BLACK

SPECIFICATIONS DOWNSPOUTS:

4" PLAIN ROUND DOWNSPOUT
- aLUMINIUM .019
- COLOR BLACK

WINDOW SCHEDULE:-

MANUFACTURER:

PELLA - LIFESTYLE SERIES

SPECIFICATIONS:

- ALUMINIUM CLAD, DOUBLE HUNG
- FIXED SDL
- INTERIOR FINISH , DOUGLASS FIR
- EXTERIOR FINISH, HEAVY DUTY ALUMINIUM, BLACK -
SDL , MIN 7/8" THK
- STANDARD LOW E 66 INSULATED GLASS

DOOR SCHEDULE:-

REAR DOORS

MANUFACTURER:

PELLA - RESERVE SERIES

SPECIFICATIONS:

- ALUMINIUM CLAD SLIDING DOORS
- INTERIOR FINISH , DOUGLASS FIR
- EXTERIOR FINISH, HEAVY DUTY ALUMINIUM, BLACK
- SDL , MIN 7/8" THK
- STANDARD LOW E 66 INSULATED GLASS

FRONT DOOR

MANUFACTURER:

THERMATRU SMOOTH STAR

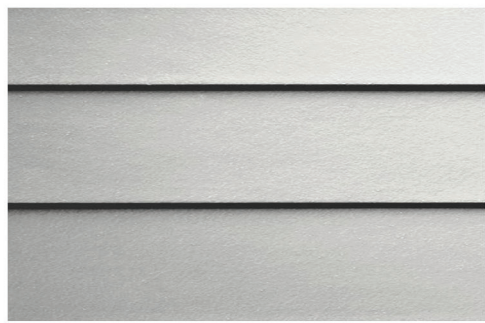
SPECIFICATIONS:

- SWINGING DOORS
- EXTERIOR FINISH, MIN WAX OR SIM. HAZELNUT STAIN

FRONT PORCH BRICK:-

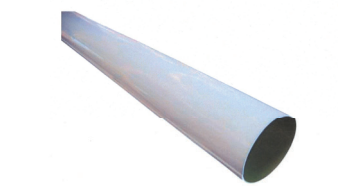
MANUFACTURER:-

ACME BRICK
COLOR - KENILWORTH



Aluminum Half Round Reverse Bead Gutters

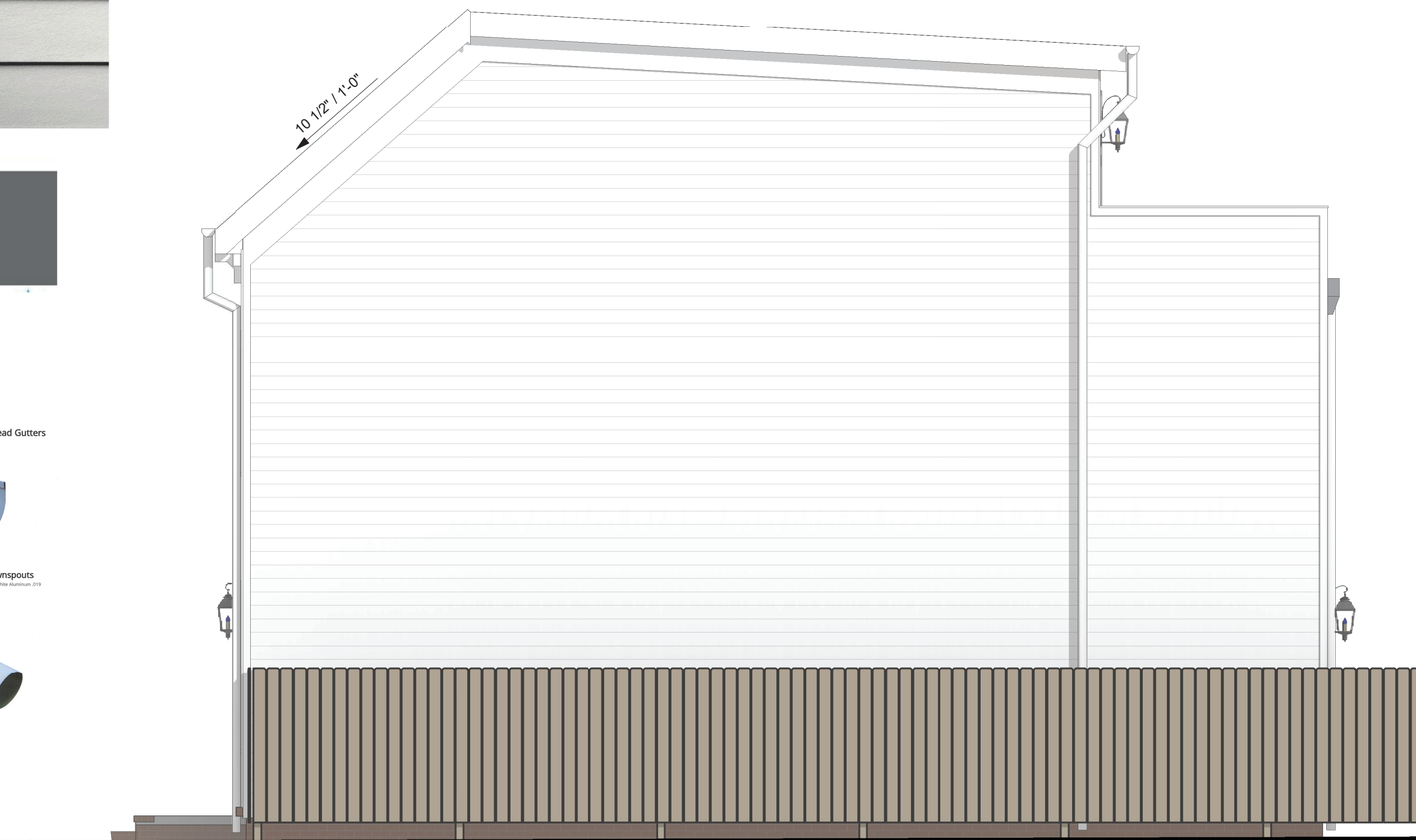
Aluminum Plain Round Downspouts



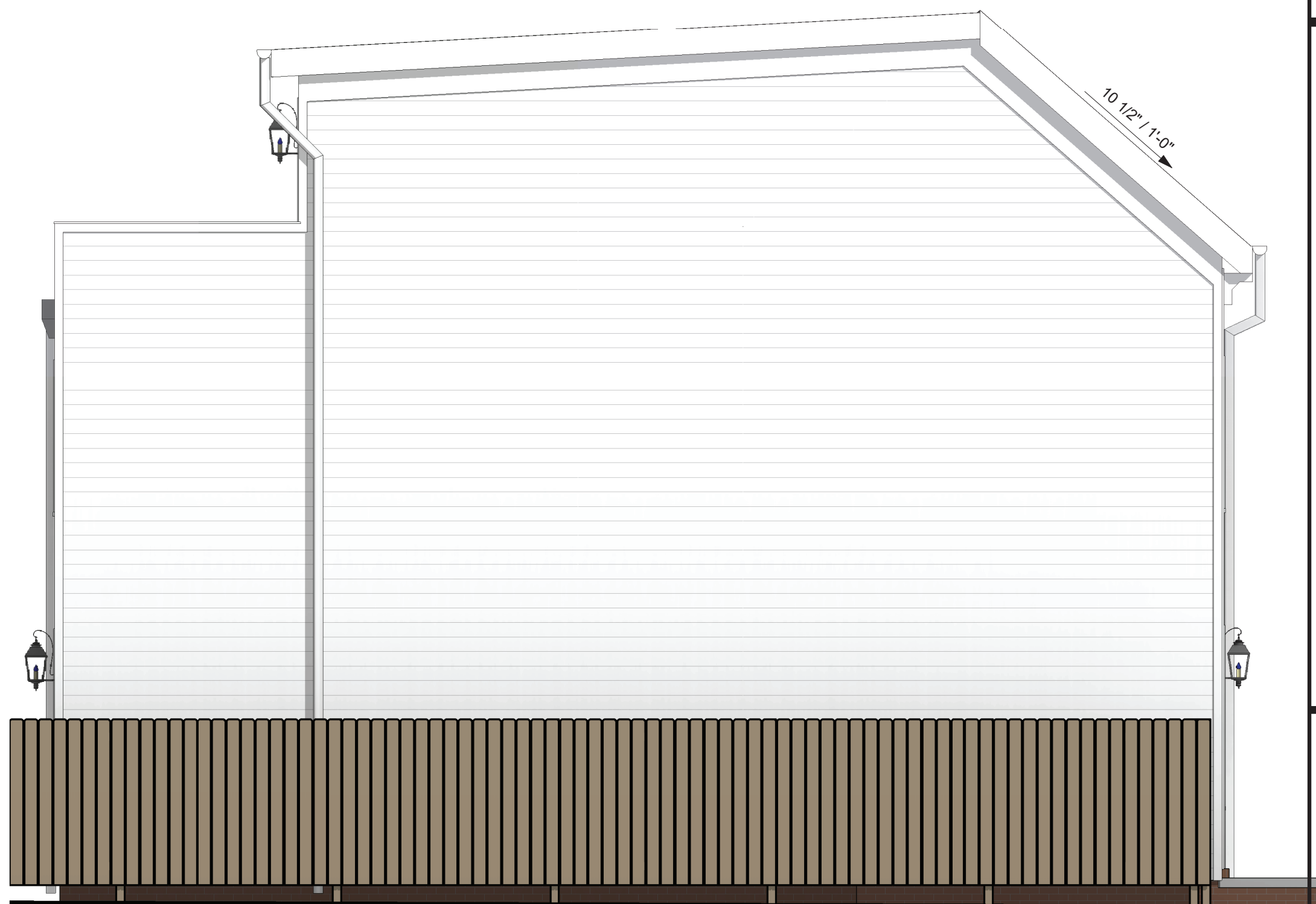
SOUTH ELEVAT ION LIGHT
FIXTURE
BLAKELEY TRANSITIONAL
2-LIGHT BLACK OUTDOOR
WALL LANTERN WITH
BEVELED GLASS



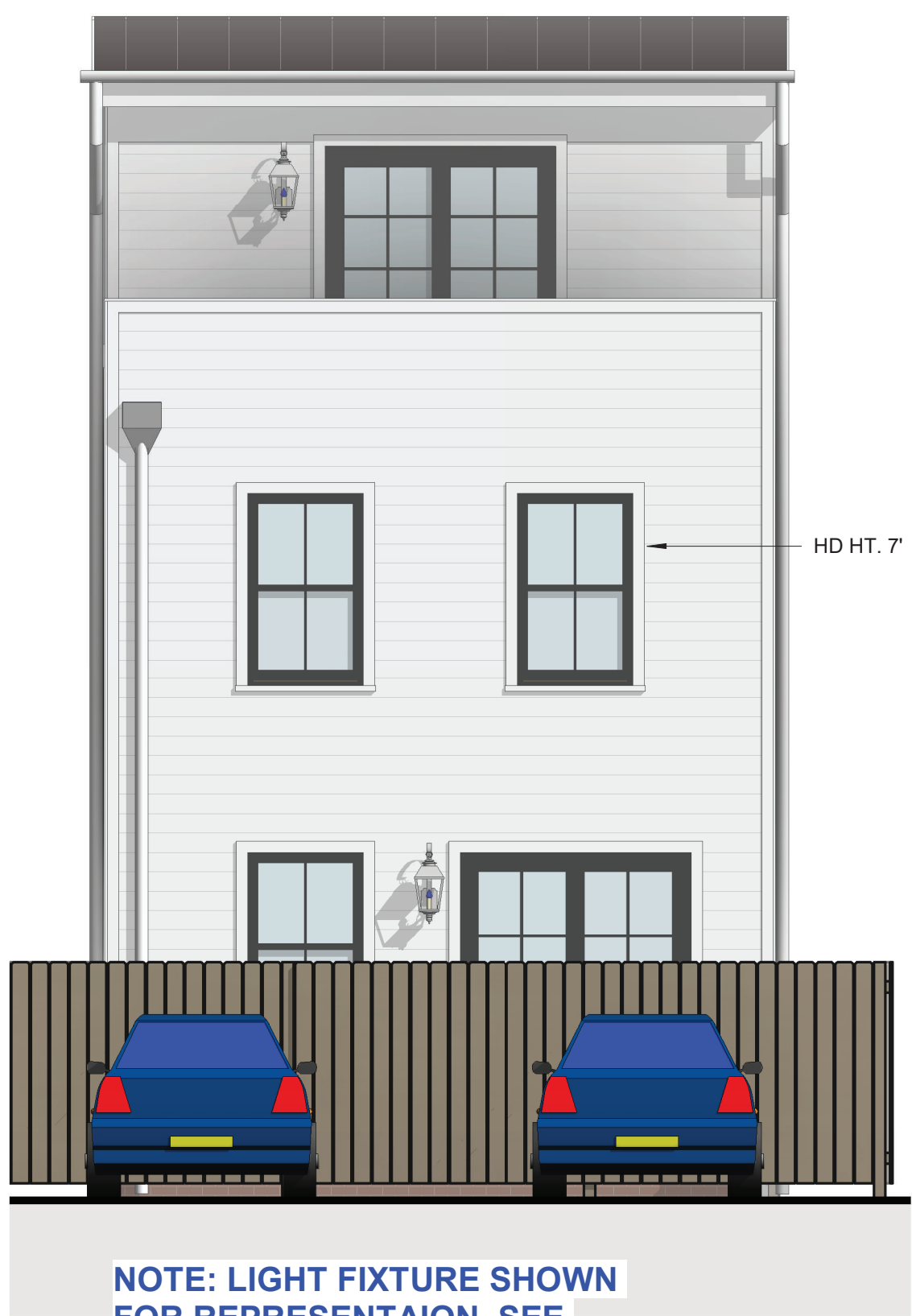
NORTH ELEVAT ION LIGHT
FIXTURE
BLACK OUTDOOR LED
WALL LANTERN SCONCE



3 EAST- ELEVATION
A200 1/4" = 1'-0"

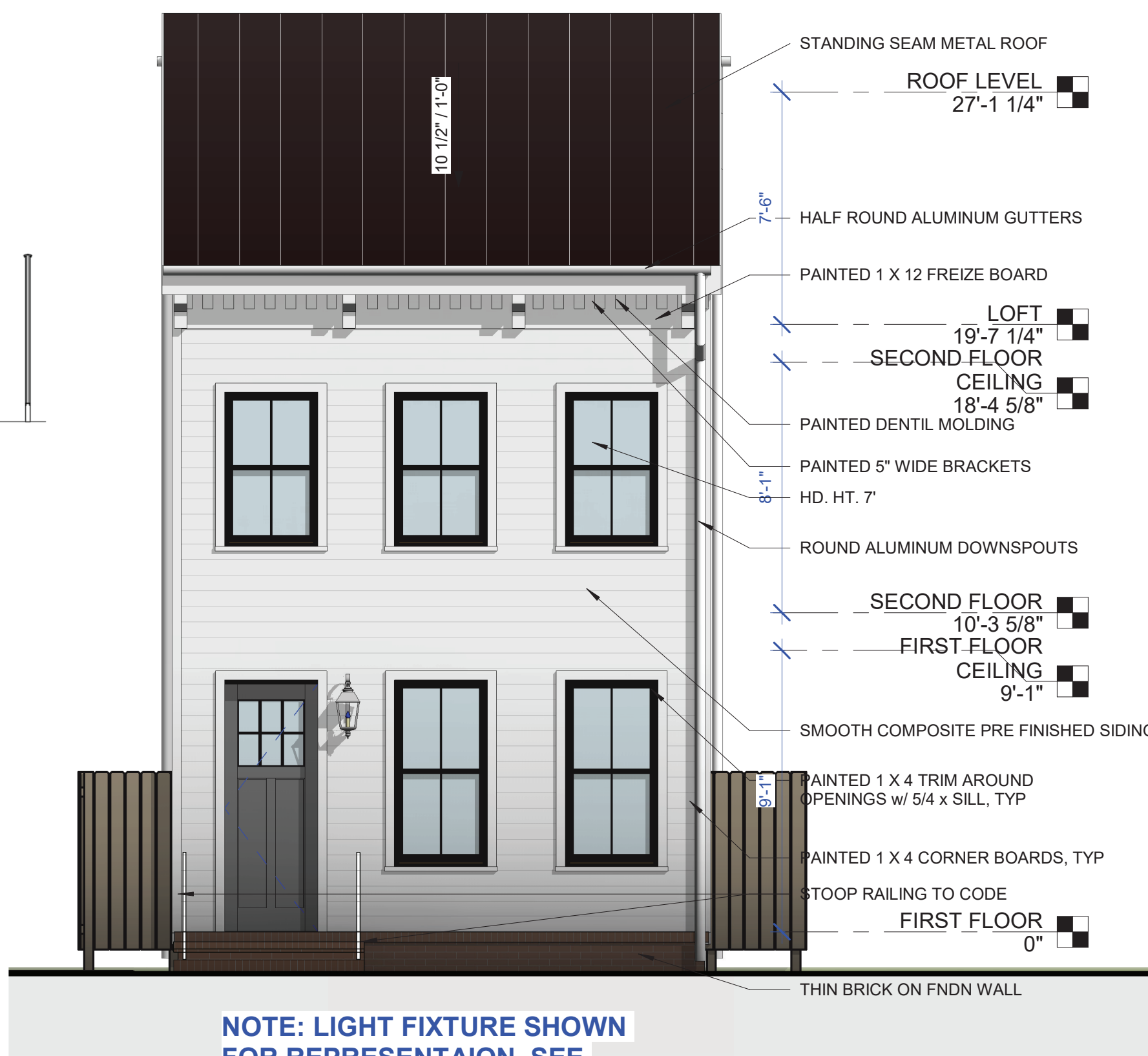


2 WEST - ELEVATION
A200 1/4" = 1'-0"



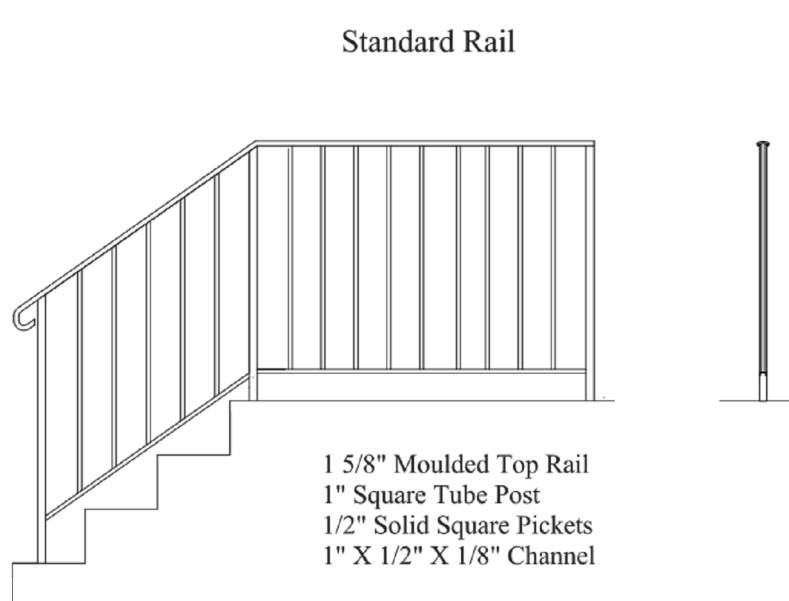
NOTE: LIGHT FIXTURE SHOWN
FOR REPRESENTAION, SEE
SPECS FOR EXACT MAKE AND
MODEL

4 NORTH - ELEVATION
A200 1/4" = 1'-0"

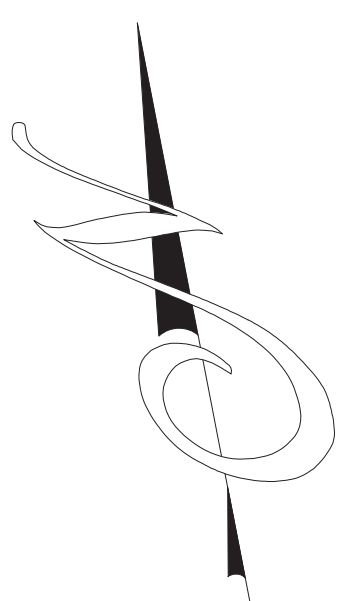


NOTE: LIGHT FIXTURE SHOWN
FOR REPRESENTAION, SEE
SPECS FOR EXACT MAKE AND
MODEL

1 SOUTH - ELEVATION
A200 1/4" = 1'-0"



FRONT STOOP RAILING
COLOR - BLACK



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J21007

PROJECT NAME AND ADDRESS

SCALE

ISSUE DATE

SHEET TITLE

SHEET #

NEW SINGLE
FAMILY HOME
1117 QUEEN STREET
CITY OF ALEXANDRIA VA

PROJECT #

REVISION DATE

11/15/21

FRONT REAR
RIGHT & LEFT
ELEVATIONS

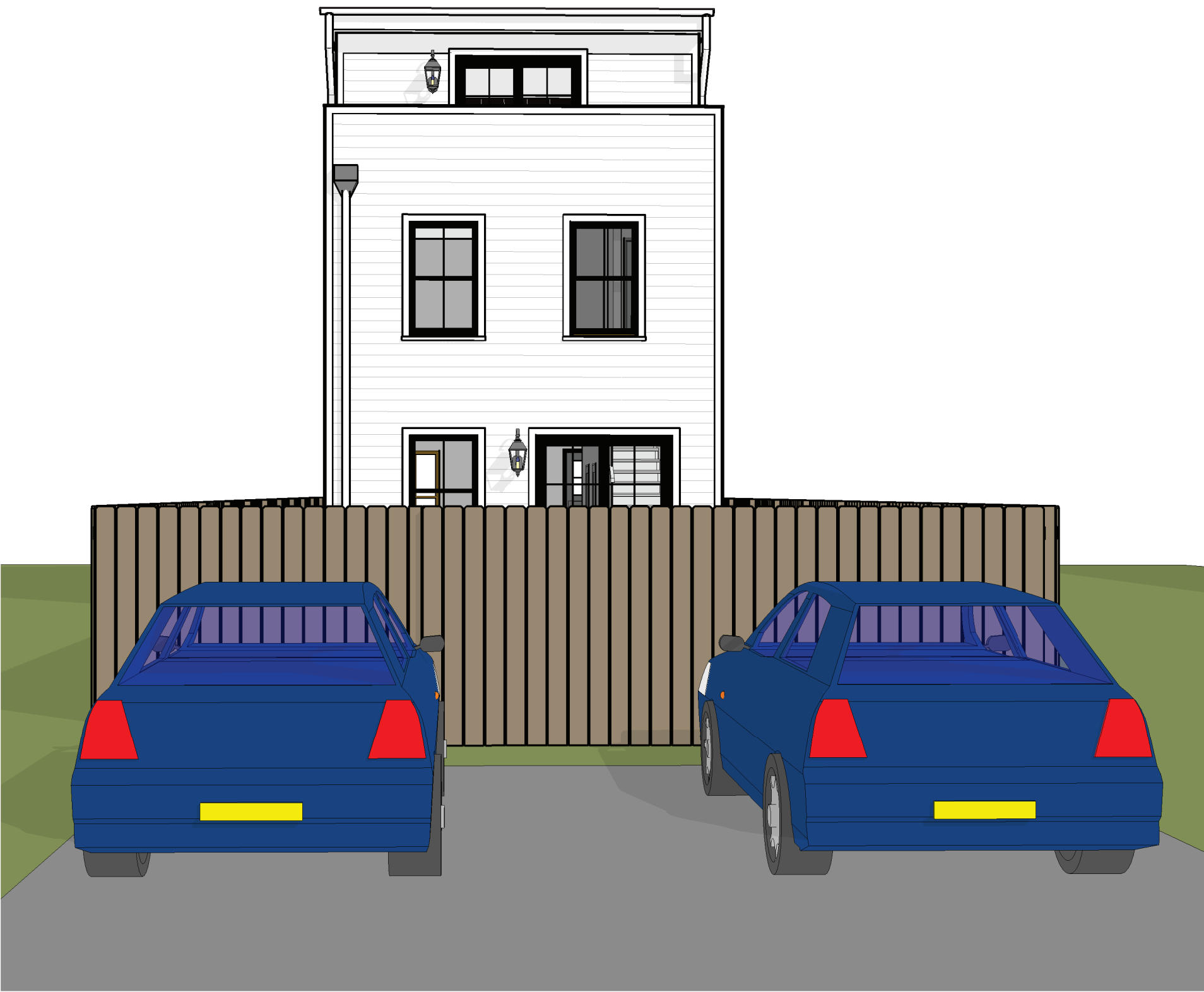
A200



1 SOUTH WEST VIEW
A201



2 NORTH WEST VIEW
A201



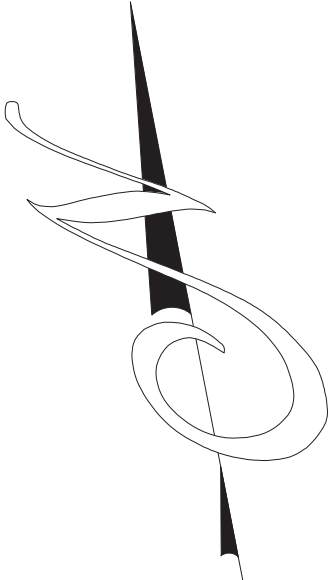
5 NORTH VIEW
A201



4 SOUTH EAST VIEW
A201



3 NORTH EAST VIEW
A201



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NEW SINGLE
FAMILY HOME
1117 QUEEN STREET
CITY OF ALEXANDRIA VA

J21007

PROJECT #

PROJECT NAME AND ADDRESS

SEAL

ISSUE DATE

SHEET TITLE

SHEET #

REVISION DATE

11/15/21

VIEWS

A201







[HOME](#) / [PRODUCT TYPES](#) / [BRICK](#) / VIRGINIA HIGHLANDS

VIRGINIA HIGHLANDS



Description

Clay brick is the superior building material for residential and commercial projects. Stronger and more sustainable than other building materials, its beauty and value is unmatched. Choose from classic red bricks to warm earth tones and unique pastels.

PRODUCT OPTIONS

^

LWM VIRGINIA HIGHLANDS	6035005669 Cart
<div><div>✓</div></div>	LWM VIRGINIA HIGHLANDS 6035005669

-

0

+

EA

▼

Cube/Skid/Box/Case Count is 480

PRODUCT DETAILS

Product ID 6035005669

Height 2-1/4"

Width 3-1/2"

Depth 7-5/8"

Cube Count 480

Cleaning Code A

ASTM Code HBS

Weight 3.6 LB

Manufacturer GESH Roanoke

LIBRARY

No documents available for this Product

LOCATIONS WHERE PRODUCT IS AVAILABLE

GESH Spring City GESH Spring City - 241 Hoyal Ln., Spring City, Tennessee 37381

GESH Wilmington GESH Wilmington - 3750 US Hwy 421 North, WILMINGTON, North Carolina 28401

GESH Charlotte - 10800 Reames Road CHARLOTTE North



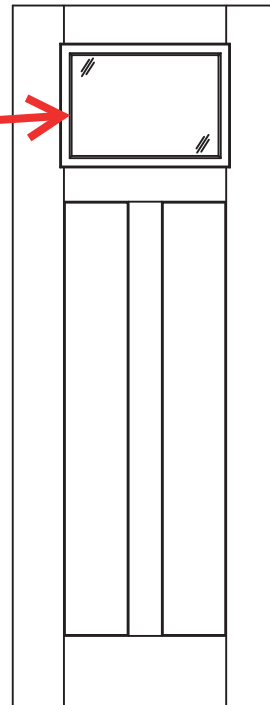
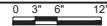
THERMA-TRU DOORS
1750 Indian Wood Circle
Maumee, OH 43537
1 (800) 843-7628
www.thermatru.com

Project Name: 1117 QUEEN STREET

Project Location: ALEXANDRIA, VA

FRONT ELEVATION

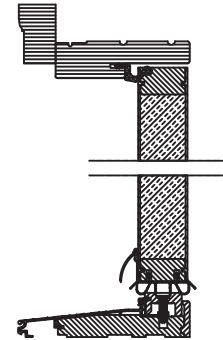
DRAWING SCALE 1/1



S82610

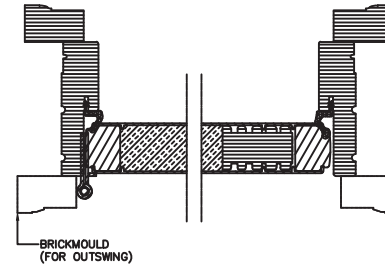
VERTICAL SECTION

DRAWING SCALE 4/1



HORIZONTAL SECTION

DRAWING SCALE 4/1

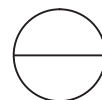


DISCLAIMER:

THERMA-TRU RESERVES THE RIGHT TO MODIFY OR CHANGE DRAWINGS AND SPECIFICATIONS WITHOUT NOTICE.
PLEASE CONTACT YOUR LOCAL REPRESENTATIVE FOR CLARIFICATION.

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.



Fiberglass Entry Door

Smooth-Star

BERGER GUTTER

K-STYLE GUTTER



MATERIALS:

Aluminum - Painted,
Aluminum - Mill Finish,
Copper,
Steel - Galvanized,
Steel - Painted Galvanized
Steel - Paint Grip

STYLES:

Hemback,
Hi-Back (45°),
Apron (90°),
Straight Back

LENGTHS:

10', 16', 20', 21', 26', 30', 32'
(also available in non-
standard lengths)

THICKNESS:

Aluminum - .024, .027, .032
Copper - 16oz, 20oz
Steel - 24ga, 26ga, 28ga

HALF ROUND GUTTER



MATERIALS:

Aluminum - Painted,
Aluminum - Mill Finish,
Copper,
Copper - FreedomGray™,
Steel - Galvanized,
Steel - Paint Grip

STYLES:

Single Bead,
Single Bead w/ 1" Flange,
Double Bead,
Reverse Bead

LENGTHS:

10', 16', 20', 21', 26', 30', 32'
(also available in non-
standard lengths)

THICKNESS:

Aluminum - .024, .027, .032
Copper - 16oz, 20oz
Steel - 24ga, 26ga, 28ga

K-STYLE GUTTER

MATERIAL: TYPE: STYLE: SIZE: THICKNESS: LENGTH: COLOR: SKU: PACKAGING:

Steel	Painted Galvanized	Straight Back	5"	28ga	10', 16', 20', 21', 26', 30', 32' (also available in non-standard lengths)	White (W6), Brown (BS)	K__••5	5 pieces / ctn
			6"				K__••6	
		Hi-Back (45°)					Call for Code	
		Apron (90°)						
	Paint Grip	Straight Back	5"	26ga		—	K__PG5	
			6"				K__PG6	

HALF ROUND GUTTER

MATERIAL: TYPE: STYLE: SIZE: THICKNESS: LENGTH: COLOR: SKU: PACKAGING:

Aluminum	Painted	Single Bead	5"	.027	10', 16', 20', 21', 26', 30', 32' (also available in non-standard lengths)	High Gloss White (HG), Royal Brown (BR)	L__••5	10' to 21' 10 pieces / ctn 22' to 26' 4 pieces / ctn 27'+ 5 pieces / ctn	
				.032		High Gloss White (32), Royal Brown (B3)	L__••5		
			6"	.032		High Gloss White (HG), Royal Brown (BR)	L__••6		
			7"			LI0••7			
			8"			LI0••8			
		Reverse Bead	6"	.027	10', 20', 25'	30° White (30W), 80° White (80W), Almond (AL), AMP DK Bronze (ADB), Black (BL), Bone Linen (LI), Dark Bronze (DB), Grecian Green (GG), Heritage Cream (HC), Herringbone (HB), Light Maple (LM), Lighthouse Red (RE), Musket Brown (MB), Musket Brown A (AMB), Natural Clay (NC), Pearl Gray (PG), Pebblestone Clay (PB), Royal Brown (RB), Savannah Wicker (SW), Terra Bronze (BZ), Tuxedo Gray (TG)	R__••6		
		Mill Finish	Single Bead	5"	.024	10', 16', 20', 21', 26', 30', 32' (also available in non-standard lengths)	—		L__MF5
				6"	.032				L__MF6
	Copper	Copper	Single Bead	5"	16oz	10', 16', 20', 21', 26', 30', 32' (also available in non-standard lengths)	—	L__CP5	10' to 25' 5 pieces / ctn 26'+ 4 pieces / ctn
					20oz			L__2C5	
6"				16oz	L__CP6				
				20oz	L__2C6				
7"					LI0CP7				
8"					LI0CP8				
Single Bead w/ 1" Flange			5"	16oz	10', 20'	L__CP5FI		10', 20' 5 pieces / ctn (West Coast Only)	
Double Bead					10', 16', 20', 21', 26', 30', 32' (also available in non-standard lengths)	L__DC5		10' to 25' 5 pieces / ctn 26'+ 4 pieces / ctn	
			6"			L__DC6			
Reverse Bead					10', 20', 25'	R__CP6			
Free-domGray™		Single Bead	5"		10', 20', 30'	L__FG5			
			6"			L__FG6			

HALF ROUND HANGERS



GEM CIRCLE W/ SPRING CLIP, NUT & BOLT

MATERIALS:

Aluminum - Painted, Aluminum - Mill Finish,
Copper, Copper - *FreedomGray®,
Steel - Galvanized,
Steel - Painted Galvanized

WIDTHS:

5", 6"

NOTES:

* Accessory item is not formed from FreedomGray® coil or sheet product. It is formed from copper product plated with Tin Zinc coating to provide similar color and properties. FreedomGray® is registered trademark of Revere Copper Products, Inc.



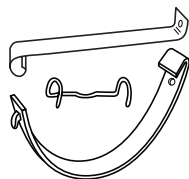
#10 COMBINATION CIRCLE & SHANK W/ SPRING CLIP

MATERIALS:

Aluminum - Painted, Copper,
Steel - Galvanized, Steel - Painted Galvanized

WIDTHS:

5", 6"



FACE MOUNT HANGER W/ CROSSBAR & SPRING CLIP

MATERIALS:

Aluminum - Painted, Copper,
Steel - Galvanized, Steel - Painted Galvanized

SIZES:

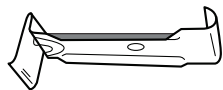
3/16" x 1" Bar
1/16" x 1" Crossbar

WIDTHS:

7", 8"

NOTES:

Steel - Galvanized and Steel - Painted Galvanized items require a 2 week lead time.



HIDDEN HANGER FOR REVERSE BEAD GUTTER ONLY

MATERIALS:

Aluminum - Painted, Copper,
Steel - Stainless

WIDTH:

6"



RIVAL STRAP HANGER

MATERIALS:

Aluminum - Painted, Aluminum - Mill Finish,
Copper, Steel - Galvanized

WIDTH:

5", 6"

HALF ROUND HANGERS



**REGAL SINGLE BEAD
FLANGE GUTTER ROOF
STRAP HANGER**

MATERIALS:

Copper, Steel - Galvanized

WIDTH:

5", 6"



**REGAL SINGLE BEAD
BAR HANGER**

MATERIALS:

Aluminum - Mill Finish, Copper, Steel - Galvanized

WIDTHS:

5", 6", 7", 8"



**REGAL DOUBLE BEAD
BAR HANGER**

MATERIALS:

Copper, Steel - Galvanized

WIDTHS:

5", 6"



**ROD & NUTS FOR
REGAL BAR HANGERS**

MATERIALS:

Aluminum - Mill Finish, Brass, Steel - Galvanized



**SPRING CLIP FOR GEM
CIRCLE / #10 COMBO
HANGER**

MATERIALS:

Aluminum - Mill Finish, Brass, Steel - Stainless,
Steel - Galvanized



NUT & BOLT FOR SHANKS

MATERIALS:

Brass, Steel - Galvanized



HALF ROUND ENDCAPS



HALF ROUND "C" STYLE END CAPS

MATERIALS:

Aluminum - Painted, Aluminum - Mill Finish, Copper, Copper - FreedomGray®,
Steel - Galvanized, Steel - Painted Galvanized, Steel - Paint Grip

WIDTHS:

5", 6", 7", 8"

HALF ROUND "C" STYLE END CAPS

MATERIAL:	STYLE:	SIZE:	THICKNESS:	COLOR:	SKU:	PACKAGING:
Aluminum	Painted	5"		High Gloss White (HG), Royal Brown (BR)	CEN•• 5	50 pieces / ctn
		6"		30° White (30W), 80° White (80W), Almond (AL), AMP Dk Bronze (ADB), Black (BL), Bone Linen (LI), Dk.Bronze (DB), Grecian Green (GG), Heritage Cream (HC), Herringbone (HE), Light Maple (LM), Lighthouse Red (RE), Musket Brown (MB), Musket Brown A (AMB), Natural Clay (NC), Pearl Gray (PG), Pebblestone Clay (PB), Royal Brown (RB), Savannah Wicker (SW), Terra Bronze (BZ), Tuxedo Gray (TG)	CEN•• 6	
		7"		High Gloss White (HG), Royal Brown (BR)	CEN•• 7	
		8"			CEN•• 8	
	Mill Finish	5"		—	CENMF5	
		6"			CENMF6	
		5"			CENMF7	
		6"			CENMF8	
Copper	Copper	5"	16oz	—	CENCP5	50 pieces / ctn
		6"			CENCP6	
		7"			CENCP7	
		8"			CENCP8	
	FreedomGray®	5"			CENFG5	
		6"			CENFG6	
Steel	Galvanized	5"	26ga	—	CEN265	50 pieces / ctn
		6"			CEN266	
		7"			CEN267	
		8"			CENGL8	
	Paint Grip	5"			CEN6G5	
		6"			CEN6G6	
		7"			CEN6G7	
		8"			CEN6G8	
	Galvalume	6"	—	—	CENGA6	



ARCHITECTURAL/STRUCTURAL SYSTEM FOR COMMERCIAL AND INSTITUTIONAL

1-3/4" STRUCTURAL AND ARCHITECTURAL SNAP-LOCK PANEL SYSTEM

Englert's most popular system, the Series 2000 integral snap-lock panel system combines architectural versatility – for cleanly detailed, continuous seam transitions from roof to mansard, fascia, wall panel or soffit – with the dramatically increased spanning and uplift capabilities of a structural system.

SYSTEM APPLICATIONS

- Medium duty for residential, commercial and industrial use
- 3"/12" minimum slope
- Can be installed over a solid deck or open framing
- Requires seam sealant if air and water tests are specified
- Engineering available for various panel sizes and substrates upon request

SUBSTRATES

- 26, 24 and 22 gauge steel
- .032" and .040" aluminum



FINISHES

Englert's Series 2000 system is available in a wide variety of coatings and colors. See the Englert color card for our full range of standard colors and paint system specifications.

Englert can match the color of virtually any material – including brick, wood and fabric – with short lead times as needed. Custom colors are available in quantities as low as 5,000 lbs. on steel or aluminum.

SYSTEM WARRANTIES

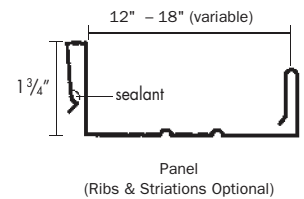
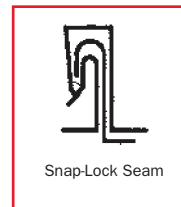
- Galvalume Plus® – 25-year steel warranty on acrylic coated Galvalume®
- PermaColor 3500 – 35-year steel or aluminum warranty on Kynar 500®/Hylar 5000® coating
- PermaMetallic 2000 – 20-year steel or aluminum warranty on Kynar 500®/Hylar 5000® coating
- Siliconized Modified Polyester – 15-year steel or aluminum coating warranty

RATINGS AND CERTIFICATIONS

- UL-90 rated over 22 gauge metal deck at 18" wide with clips at 48" o.c. (24 ga. steel)
- UL-90 rated over 16 gauge purlins at 18" wide with clips at 48" o.c. (24 ga. steel)
- ASTM-E-1646-95 and ASTM-E-331 water penetration tested
- ASTM-E-1680-95 and ASTM-E-283 air infiltration tested
- ASTM-E-1592-98 and ASTM-E-330 uplift tested (24 ga. steel)
- ASTM-E-84 Class A fire rating on coating and substrate (24 ga. steel)
- Florida Building Code product approval listed
- Metro-Dade County certified



Series 2000 1-3/4" Integral Snap-Lock



Allowable Uniform Live Load (PSF)

No. of Spans	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"
--------------	-------	-------	-------	-------	-------

16" Width — 24 ga. steel

2	62	49	40	33	27
3 or more	72	57	46	38	32

16" Width — 22 ga. steel

2	80	63	51	42	35
3 or more	93	74	60	49	41

16" Width — .032" aluminum

2	23	18	15	12	10
3 or more	27	21	17	14	12

18" Width — 24 ga. steel

2	55	43	35	29	24
3 or more	64	51	41	34	28

18" Width — 22 ga. steel

2	71	56	45	38	32
3 or more	83	65	53	44	37

18" Width — .032" aluminum

2	20	16	13	11	9
3 or more	23	19	15	12	10

Note: Load values shown may be increased by 1/3 for allowable wind load.

Kynar 500® is a registered trademark of Atochem. N.A.

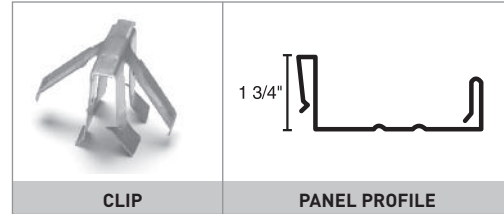
Hylar 5000® is a registered trademark of Ausimont USA

Galvalume® and Galvalume Plus® are registered trademarks of BIEC International, Inc.
Copyright ©2011 Englert Inc. All rights reserved. 90350B

Distributed by:

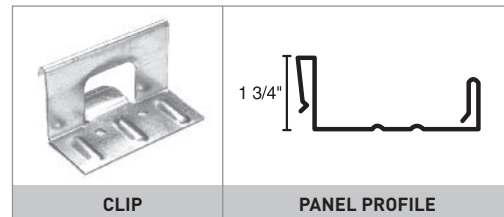
SERIES 2000

Part No.	Description	Ratings	Box Quantity	Availability
05079B	R Clip 2000 Butterfly Batten, 24 Ga. Stainless Steel	Not Rated	400	Stock



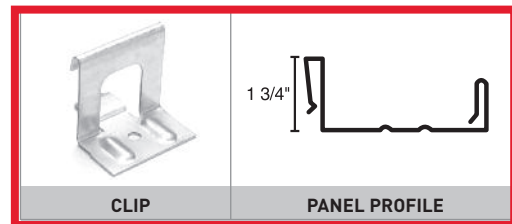
SERIES 2000

Part No.	Description	Ratings	Box Quantity	Availability
05076B	R Clip 2000 Universal, 18 Ga. Galvanized	UL	200	Stock
05076D	R Clip 2000 Universal, 18 Ga. Stainless Steel	Not Rated	200	4-6 Weeks



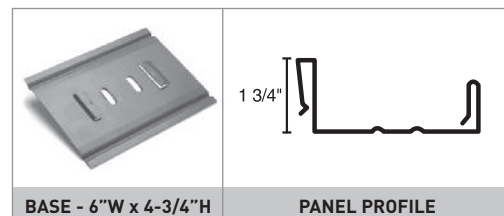
SERIES 2000

Part No.	Description	Ratings	Box Quantity	Availability
05076C	R Clip 2000 Universal, 18 Ga. Galvanized	Not Rated	400	Stock
05077B	R Clip 2000 Universal, 20 Ga. Stainless Steel	Not Rated	400	4-6 Weeks



SERIES 2001

Part No.	Description	Ratings	Box Quantity	Availability
*05075C	R BASE 2001 Bearing Plate, 24 Ga. Galvalume	Not Rated	200	Stock
05075F	R BASE Universal, 24 Ga. Galvalume	Not Rated	200	4 Weeks



*(For use with 05076B or 05076D), (universal base can be used with any clip over ISO board insulation)

NOTE: These clips are designed for use with Englert Series Metal Roofing Systems. If you are using a similar profile and have not used our clips before, we encourage you to request a sample to check for fit before you place an order with us. **Contact your local branch for a sample today!**

ENGLERT S2000 ROOF PANEL

PANEL MATERIAL SHALL BE:
.032" ALUMINIUM

INTEGRAL SNAP SEAMS SHALL BE 1 $\frac{3}{4}$ " HIGH
AT 18" WIDE

NOT ALL PANEL SIZES AVAILABLE IN ALL
REGIONS. CONSULT ENGLERT FOR DETAILS.

COLOR PER PROJECT SAMPLE.



NOTE: PANEL OPTIONS PER PROJECT
SAMPLE. SEE DETAIL# R01.

**ENGLERT™**

www.englertinc.com
800-364-5378

GENERIC BEST PRACTICE ASSEMBLY
SHOWN. WATERTIGHTNESS
WARRANTY NOT IMPLIED.
WHEN SITE CONDITION DIFFERS,
SPECIFIC ENGINEERING NECESSARY.

ROOF PANEL PROFILE	
SERIES S2000	

DETAIL SUBJECT TO CHANGE WITHOUT NOTICE.
Detail # R01.20

Technical Data

DATA

Length – 12 ft. (3.657 m)
Width – 4 ft. 5 in. (1.364 m) plus engine
projection.
Height – 1 ft. 3 in. (38.1 cm) plus engine
projection.

PANEL FORMER ON TRAILER

Length – 17 ft. 2 in. (5.232 m)
Width – 7 ft. 3 in. (2.21 m)
Height – 6 ft. 3 in. (182.1 cm) with reel.
Weight – 3990 lbs. (1810 kg)

POWER

13 HP electric start gas engine.

FORMING

16 hydraulically powered chain driven cast
polyurethane drive rollers.

SHEAR

Electrically activated, hydraulically
powered, infinitely adjustable, full cycle.

SPEED

Approximately 90 ft. (27.43m) / minute.
(Speed should be decreased 25-50% when
using sealant pump depending on
temperature.)

MATERIALS FORMED

Steel – 30 gauge to 22 gauge. (painted,
galvanized, aluminized)
Aluminum – .019 in. (.48mm) to .040 in.
(1.02mm)
Copper – 16 oz. to 20 oz.

Features

Separate drive and form rollers, eliminates most oil canning.

Polyurethane drive rollers

Chrome plated forming roller systems.

Welded tubular frame

13 HP Honda engine

Hydraulic drive system and shear are electrically activated.

Clip relief rollers (not included with Series2000 Panel)

Two pair of 1" wide adjustable flat rib rollers

Infinitely variable full cycle shear.

Available Options

12,000 lb. capacity tandem axle trailer.

Dual overhead de-coiler

16 inch to 20 inch expandable arbors

10ft. sections of variable height run out tables (up to 50ft. mounts on machine)

Dual register electronic control-panel length and quantity.

7.5 HP electric motor, 220V 3PH. 60 Hz.

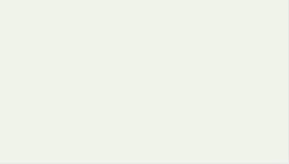
Striation rollers

Pencil Rib Rollers (3/8" and 5/8" wide)

Hot melt system sealant.

Hand seamer: 2400/2500 - 1300/1301.

Electric seamer for use with A1300/A1301 or S2400/S2500 panels.



BONE WHITE



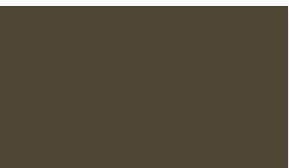
BURGUNDY



CHARCOAL GRAY



COLONIAL RED



DARK BRONZE



DOVE GRAY



DEEP RED



EVERGLADE MOSS



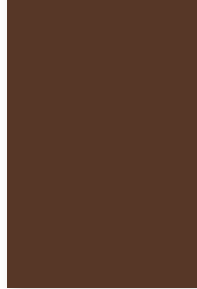
FOREST GREEN



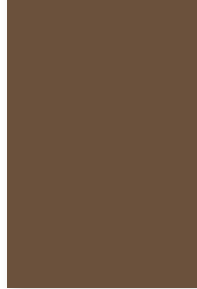
HARTFORD GREEN



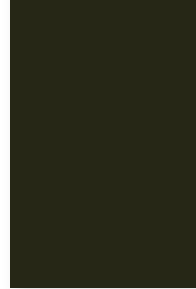
HEMLOCK GREEN



MANSARD BROWN



MEDIUM BRONZE



MATTE BLACK



PACIFIC BLUE



PATINA GREEN



ROYAL BLUE



SLATE BLUE



SLATE GRAY



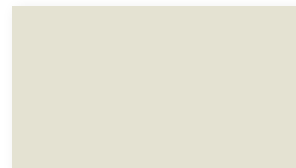
SUNETT BLUE



SANDSTONE



SIERRA TAN



STONE WHITE



TERRA COTTA



Standard COLORS and COATINGS

PERMACOLOR 3500

Full Strength 70% Kynar 500®/Hylar 5000®

All colors available in
Galvalume and Aluminum
(.032", .040" & .050")

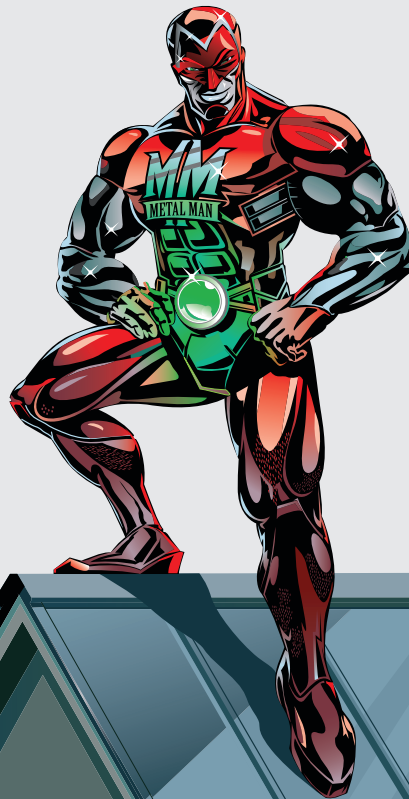


To view current SRI values,
please visit the Englert website.

Colors shown are close to actual finishes
however, due to the limitations of
printing processes, slight variations
may exist. Please contact Englert for
actual color chips before ordering.



PPG is a registered trademark of PPG Industries Ohio, Inc.



MILL FINISH GALVALUME-PLUS®



PERMAMETALLICS 3500*

*Premium priced paint systems.

CHAMPAGNE* (Metallic) Mica 2-Coat System



COPPER* (Metallic) Mica 2-Coat System



PREWEATHERED GALVALUME®*

(Metallic) Mica 2-Coat System

MILL FINISH (Aluminum) Made to order – available in sheets only



FINISHES THAT MEET ANY DESIGN OBJECTIVE

Englert is one of the few single-source metal roof manufacturers with an in-house coil coating line and an exceptionally broad range of finishes, whether the design calls for a natural weathered appearance or bright, high-performance, full-strength fluorocarbon colors.

Custom Colors

We can match the color of virtually any material, including brick, wood and fabric. Englert offers short lead times, and our minimum custom-color order requirements are among the industry's lowest.



ROOFING KYNAR-COATED STANDARDS IN STOCK - SHEET AND COIL

COLORS	STEEL			ALUMINUM			
	22g	24g	26g	.032	.040	.050	.063
Galvalume-Plus®		✓	✓				
Burgundy	•	✓	•	✓	•	•	•
Bone White	•	✓	•	✓	✓	✓	•
Charcoal Gray	•	✓	✓	✓	✓	✓	•
Colonial Red	•	✓	✓	✓	•	•	•
Dark Bronze	•	✓	✓	✓	✓	✓	•
Dove Gray	•	✓	✓	✓	✓	✓	•
Deep Red	•	✓	•	✓	•	•	•
Everglade Moss	•	✓	•	✓	•	•	•
Forest Green	•	✓	✓	✓	✓	•	•
Hartford Green	•	✓	✓	✓	✓	•	•
Hemlock Green	•	✓	•	✓	•	•	•
Mansard Brown	•	✓	✓	✓	✓	•	•
Medium Bronze	•	✓	✓	✓	✓	✓	•
Mill Finish (Aluminum)*				✓*	✓*	✓*	•*

*Made to order – available in sheets only.

COLORS	STEEL			ALUMINUM			
	22g	24g	26g	.032	.040	.050	.063
Matte Black	•	✓	✓	✓	✓	✓	•
Pacific Blue	•	✓	•	✓	•	•	•
Patina Green	•	✓	•	✓	•	•	•
Royal Blue	•	✓	•	✓	•	•	•
Slate Blue	•	✓	•	✓	•	•	•
Slate Gray	•	✓	✓	✓	✓	✓	•
SunNet Blue	•	✓	•	✓	•	•	•
Sandstone	•	✓	•	✓	✓	✓	•
Sierra Tan	•	✓	•	✓	✓	✓	•
Stone White	•	✓	•	✓	✓	✓	•
Terra Cotta	•	✓	•	✓	•	•	•
Champagne (Metallic)*	•	✓	•	✓	✓	•	•
Copper (Metallic)*	•	✓	•	✓	✓	•	•
Preweathered (Metallic)*	•	✓	•	✓	✓	✓	•

*Mica 2-Coat System

✓ - Standard • - Minimum Quantities Required

Colors shown are close to actual finishes however, due to the limitations of printing processes, slight variations may exist. Please contact Englert for actual color chips before ordering.

The coil and sheet availability shown above is subject to change at anytime without notice. Contact Englert for current offering.

ENGLERT INC.
1200 Amboy Avenue, Perth Amboy, NJ 08861
Phone: 732-826-8614 • Fax: 732-826-8865
info@englertinc.com • englertinc.com

DISTRIBUTED BY:

HardiePanel® vertical siding

Submittal Form

02

Submitted to:

Project Name:

Submitted by:

Date:

☒ HZ5® Product Zone ☐ HZ10® Product Zone

Product Width: ☒ 4x8ft ☐ 4x9ft ☒ 4x10ft

Product Finish: ☐ Primed ☒ ColorPlus® Technology

Product Texture: ☒ Smooth ☐ Select Cedarmill® ☐ Sierra 8 ☐ Stucco

HardiePanel® vertical siding

Specification Sheet

02

DIVISION: 07 00 00 THERMAL AND MOISTURE PROTECTION

SECTION: 07 46 46 FIBRE CEMENT SIDING

HARDIEPANEL® VERTICAL SIDING

Manufacturer

James Hardie Building Products Inc

The products are manufactured at the following locations, with quality control inspections by ICC-ES:

- Cleburne, Texas
- Plant City, Florida
- Reno, Nevada
- Waxahachie, Texas
- Peru, Illinois
- Pulaski, Virginia
- Tacoma, Washington
- Fontana, California

Compliance with the following codes

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2012, 2009 and 2006 International Residential Code® (IRC)

Features

- Noncombustible
- Dimensionally Stable
- Resistant to damage caused by pests
- Weather Resistant-Engineered for Climate®
- Impact resistant
- Sustainable

Use

James Hardie fiber-cement panels are used as exterior wall covering. The product complies with IBC Section 1404.10 and IRC Section R703.10. The product may be used on exterior walls of buildings of Type I, II, III and IV construction (IBC).

Description

HardiePanel vertical siding is a single-faced, cellulose fiber-reinforced cement (fiber-cement) product. HardiePanel vertical siding complies with ASTM C1186, as Grade II, Type A; has a flame-spread index of 0 and a smoke-developed index of 5 when tested in accordance with ASTM E84; and is classified as noncombustible when tested in accordance with ASTM E136.

Available Sizes

Product	Width (inches)	Length (feet)	Thickness (inches)
HardiePanel vertical siding	48	8, 9*, 10	5/16

* Size not available in ColorPlus® Technology, primed only.

Texture & Finish

HardiePanel vertical siding comes in a variety of textures and finishes. The product is available in smooth, wood grain, Sierra 8, or stucco. Finish options are primed for field paint, or factory finished with ColorPlus technology. Color availability varies by region.

Engineered for Climate®

HardiePanel vertical siding is engineered for performance to specific weather conditions by climate zones as identified by the following map.



Performance Properties

	General Property	Test Method	Unit or Characteristic	Requirement	Result
PHYSICAL ATTRIBUTES	Dimensional Tolerances	ASTM C1185	Length	± 0.5% or ± 1/4 in	Pass
			Width	± 0.5% or ± 1/4 in	
			Thickness	± 0.04 in	
			Squareness	<1/32 in/ft of length	
			Edge Straightness	<1/32 in/ft of length	
	Density, lb/ft³	ASTM C1185		As reported	83
	Water Absorption, % by mass	ASTM C1185		As reported	36
	Water Tightness	ASTM C1185	Physical Observations	No drop formation	Pass
Flexural Strength	ASTM C1185	Wet conditioned, psi	>1015 psi	Pass	
		Equilibrium conditioned, psi	>1450 psi		
THERMAL	Thermal Conductivity	ASTM C177	(BTU/(hr·ft²·F))/inch		2.07
	Actual Thermal Conductivity		(K _{eff})	As reported	6.62
	Thermal Resistance		R=1/ K _{eff}		0.48
	Actual Thermal Resistance		(R)		0.15
DURABILITY	Warm Water Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
	Heat/Rain Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
	Freeze/Thaw Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
			Mass Loss, %	≤ 3.0%	
			Freeze/Thaw, % strength retention	≥ 80%	
UV Accelerated Weathering Test	ASTM G23	Physical Observations	No cracking, checking, or crazing	Pass	
FIRE CHARACTERISTICS	Surface Burning Characteristics	ASTM E84	Flame Spread Index (FSI)		0
			Smoke Developed Index (SDI)		≤ 5
			Fuel Contributed		0
			NFPA Class		A
			Uniform Building Code Class	As reported	1
	International Building Code® class		A		
	Noncombustibility	ASTM E136	Noncombustible	Pass/fail	Pass
	Fire Resistance Rated Construction	ASTM E119	Fire Resistance Rating	1-hour	Note 1

Note 1: listed on Warnock Hersey and ESR 2290

Installation

Install HardiePanel vertical siding in accordance with:

- HardiePanel vertical siding installation instructions
- ICC-ES ESR-1844
- Requirements of authorities having jurisdiction

Warranty

HardiePanel vertical siding: 30-year, Non-Prorated, Limited Warranty
ColorPlus Technology: 15-year Limited Finish Warranty

Sustainable Design Contribution

- Regionally sourced content- varies by project location
- Avoidance of certain chemicals or Red List Compliance

Detailed product information for LEED projects, or other state or regional sustainability programs is available through James Hardie Technical Services.

Storage and Handling

Store flat and keep dry and covered prior to installation.

Technical Services

Contact James Hardie Technical Services online at JamesHardie.com, or by phone at (800)426-4051

P2



Additional Installation Information, Warranties, and Warning are available at JamesHardie.com

1 866 442 7343 | www.jameshardie.com

IMPORTANT: Failure to install and finish this product in accordance with applicable building codes and James Hardie written application instructions may affect system performance, violate local building codes, void the product-only warranty and lead to personal injury.

DESIGN ADVICE: Any information or assistance provided by James Hardie in relation to specific projects must be approved by the relevant specialists engaged for the project eg. builder, architect or engineer. James Hardie will not be responsible in connection with any such information or assistance.

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HardiePlank®

Sleek and strong, HardiePlank® lap siding is not just our best-selling product – it's the most popular brand of siding in America.

With a full spectrum of colors and textures, homeowners can enjoy protection from the elements and the versatility to make their dream home a reality. From Victorians to Colonials, HardiePlank lap siding sets the standard in exterior cladding.

HardieTrim®
Boards
Arctic White

SMOOTH WILL
BE INSTALLED. NOT
TEXTURED

HardiePlank®
Lap Siding
Select Cedarmill®
Khaki Brown

A classic look for
THE HOME OF THEIR DREAMS.

HardiePlank® Lap Siding

Submittal Form

01

Submitted to:

Project Name:

Submitted by:

Date:

☒ HZ5® Product Zone ☐ HZ10® Product Zone

Product Width: ☒ 5-1/4in ☐ 6-1/4in ☒ 7-1/4in ☐ 8in ☐ 8-1/4in ☐ 9-1/4in ☐ 12in

Product Finish: ☐ Primed ☒ ColorPlus® Technology

Product Texture: ☒ Smooth ☐ Select Cedarmill® ☐ Colonial Roughsawn®
☐ Colonial Smooth® ☐ Rustic Cedar

HardiePlank® Lap Siding

Specification Sheet

01

DIVISION: 07 00 00 THERMAL AND MOISTURE PROTECTION

SECTION: 07 46 46 FIBRE CEMENT SIDING

HARDIEPLANK® LAP SIDING

Manufacturer

James Hardie Building Products, Inc

The products are manufactured at the following locations, with quality control inspections by ICC-ES:

- Cleburne, Texas
- Plant City, Florida
- Reno, Nevada
- Waxahachie, Texas
- Peru, Illinois
- Pulaski, Virginia
- Tacoma, Washington
- Fontana, California

Compliance with the following codes

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2012, 2009 and 2006 International Residential Code® (IRC)

Features

- Noncombustible
- Dimensionally Stable
- Resists damage from pests
- Weather Resistant-Engineered for Climate®
- Impact resistant
- Sustainable

Use

James Hardie fiber-cement lap siding is used as exterior wall covering. The product complies with IBC Section 1404.10 and IRC Section R703.10. The product may be used on exterior walls of buildings of Type I, II, III and IV construction (IBC)

Description

HardiePlank lap siding is a single-faced, cellulose fiber-reinforced cement (fiber-cement) product. HardiePlank lap siding complies with ASTM C1186, as Grade II, Type A; has a flame-spread index of 0 and a smoke-developed index of 5 when tested in accordance with ASTM E84; and is classified as noncombustible when tested in accordance with ASTM E136.

Available Sizes

Product	Width (in)	Length	Thickness (in)
HardiePlank lap siding*	5-1/4, 6-1/4, 7-1/4, 8, 8-1/4, 9-1/4, 12	12 feet	5/16

* HZ5: 9-1/4, 12 only available primed HZ10: 5-1/4, 9-1/4, 12 only available primed.

Texture & Finish

HardiePlank lap siding comes in a variety of textures and finishes. The product is available in smooth or wood grain texture. Additional textures are available on a regional basis. Finish options are primed for field paint, or factory finished with ColorPlus® Technology. Color availability varies by region.

Engineered for Climate®

HardiePlank lap siding is engineered for performance to specific weather conditions by climate zones as identified by the following map.



Performance Properties

General Property		Test Method	Unit or Characteristic	Requirement	Result
PHYSICAL ATTRIBUTES	Dimensional Tolerances	ASTM C1185	Length	$\pm 0.5\%$ or $\pm 1/4$ in	Pass
			Width	$\pm 0.5\%$ or $\pm 1/4$ in	
			Thickness	± 0.04 in	
			Squareness	$<1/32$ in/ft of length	
			Edge Straightness	$<1/32$ in/ft of length	
	Density, lb/ft ³	ASTM C1185		As reported	83
	Water Absorption, % by mass	ASTM C1185		As reported	36
THERMAL	Water Tightness	ASTM C1185	Physical Observations	No drop formation	Pass
	Flexural Strength	ASTM C1185	Wet conditioned, psi	>1015 psi	Pass
			Equilibrium conditioned, psi	>1450 psi	
	Thermal Conductivity	ASTM C177	(BTU/(hr·ft ² ·F))/inch	As reported	2.07
DURABILITY	Actual Thermal Conductivity		(K_{eff})		6.62
	Thermal Resistance		$R=1/K_{eff}$		0.48
	Actual Thermal Resistance		(R)		0.15
	Warm Water Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
FIRE CHARACTERISTICS	Heat/Rain Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
	Freeze/Thaw Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
			Mass Loss, %	$\leq 3.0\%$	
	UV Accelerated Weathering Test	ASTM G23	Freeze/Thaw, % strength retention	$\geq 80\%$	Pass
			Physical Observations	No cracking, checking, or crazing	
FIRE CHARACTERISTICS	Surface Burning Characteristics	ASTM E84	Flame Spread Index (FSI)		0
			Smoke Developed Index (SDI)		≤ 5
			Fuel Contributed		0
			NFPA Class		A
	Noncombustibility	ASTM E136	Uniform Building Code Class	As reported	1
			International Building Code® class		A
FIRE CHARACTERISTICS	Noncombustibility	ASTM E136	Noncombustible	Pass/fail	Pass
	Fire Resistance Rated Construction	ASTM E119	Fire Resistance Rating	1-hour	Note 1

Note 1: listed on Warnock Hersey and ESR 2290

Installation

Install HardiePlank lap siding in accordance with:

- HardiePlank lap siding installation instructions
- ICC-ES ESR 2290
- Requirements of authorities having jurisdiction

Warranty

HardiePlank lap siding: 30-year, Non-Prorated, Limited Warranty
ColorPlus Technology: 15-year Limited Finish Warranty

Sustainable Design Contribution

- Regionally sourced content- varies by project location
- Avoidance of certain chemicals or Red List Compliance

Detailed product information for LEED projects, or other state or regional sustainability programs is available through James Hardie Technical Services.

Storage and Handling

Store flat and keep dry and covered prior to installation.

Technical Services

Contact James Hardie Technical Services online at JamesHardie.com, or by phone at (800)426-4051



JamesHardie

Additional Installation Information, Warranties, and Warning are available at JamesHardie.com

1 866 442 7343 | www.jameshardie.com

IMPORTANT: Failure to install and finish this product in accordance with applicable building codes and James Hardie written application instructions may affect system performance, violate local building codes, void the product-only warranty and lead to personal injury.

DESIGN ADVICE: Any information or assistance provided by James Hardie in relation to specific projects must be approved by the relevant specialists engaged for the project eg. builder, architect or engineer. James Hardie will not be responsible in connection with any such information or assistance.

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HardieTrim®

Form meets function at every angle with HardieTrim® boards. With an authentic look, HardieTrim boards provide design flexibility for columns, friezes, doors, windows and other accent areas.

Better than wood, it will complement your long-lasting, lower maintenance James Hardie siding – adding punctuation to your design statement.

HardieTrim®
5/4 x 3.5 in.
Khaki Brown

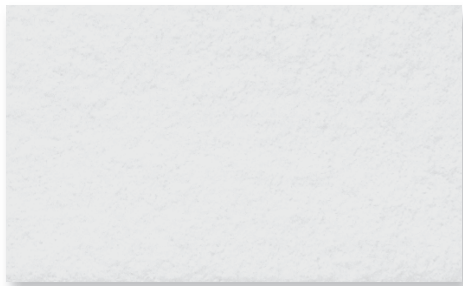
HardiePlank®
6.25 in. Smooth
Navajo Beige

The performance you require
THE DISTINCTIVENESS YOU DESIRE.

HardieTrim®

Length 12 ft boards

NT3® BOARDS SMOOTH



4/4 SMOOTH

Thickness	.75 in				
Width	3.5 in	5.5 in	7.25 in	9.25 in	11.25 in
ColorPlus Pcs/Pallet	312	208	156	104	104
STATEMENT COLLECTION™	✓	✓	✓	AW	✓
DREAM COLLECTION™	✓	✓	✓	✓	✓
PRIME					

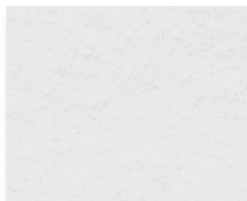
5/4 SMOOTH

Thickness	1 in					
Width	3.5 in	4.5 in	5.5 in	7.25 in	9.25 in	11.25 in
ColorPlus Pcs/Pallet	240	200	160	120	80	80
STATEMENT COLLECTION™	✓	✓	✓	✓	AW	✓
DREAM COLLECTION™	✓	✓	✓	✓	✓	✓
PRIME						

AW - Arctic White only. Not available in the standard trim product Statement Collection™ color offering.

BATTEN BOARDS

SMOOTH



RUSTIC GRAIN®



SMOOTH & RUSTIC GRAIN®

Thickness	.75 in	STATEMENT COLLECTION™	✓
Width	2.5 in	DREAM COLLECTION™	✓
Prime Pcs/Pallet	190	PRIME	✓
ColorPlus Pcs/Pallet	437		


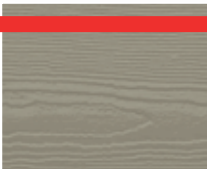
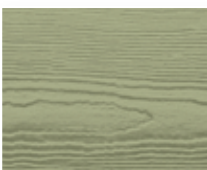

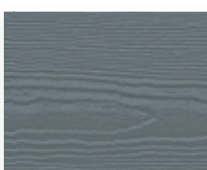


STATEMENT COLLECTION™

Make your next home stand out with our Statement Collection™ products. Carefully curated by our design experts specifically for your market, the collection brings together the most popular James Hardie ColorPlus® siding and trim styles, textures, and colors. This stunning selection is locally stocked and designed for simplicity - making it easier than ever to get a beautiful, long-lasting home exterior.

ColorPlus® Technology

SMOOTH PANELS

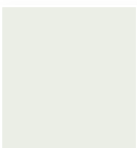


Plank, Panel, Shingle and Batten Color Offering

			
ARCTIC WHITE	COBBLE STONE	NAVAJO BEIGE	KHAKI BROWN
			
MONTEREY TAUPE	WOODSTOCK BROWN	TIMBER BARK	RICH ESPRESSO
			
HEATHERED MOSS	MOUNTAIN SAGE	LIGHT MIST	PEARL GRAY
			
GRAY SLATE	BOOTHBAY BLUE	EVENING BLUE	DEEP OCEAN
			
AGED PEWTER	NIGHT GRAY	IRON GRAY	COUNTRYLANE RED

Trim Color Offering

					
ARCTIC WHITE	COBBLE STONE	KHAKI BROWN	MONTEREY TAUPE	TIMBER BARK	IRON GRAY

Soffit Color Offering

		
ARCTIC WHITE	COBBLE STONE	TIMBER BARK

Colors shown are as accurate as printing methods will permit. Please see actual product sample for true color.



AZEK TRIM | #1 BRAND OF TRIM

Offering the unequalled combination of Uniformity, Durability, Workability and Beauty, AZEK Trim looks and feels like real wood, yet requires low maintenance to provide lasting curb appeal.

AZEK Trim products are available in many dimensions and sizes, most in both Traditional (smooth) and Frontier (rustic texture). With a building code listing (ESR-1074), AZEK Trim products can be worked similar to wood - even mitered, routed and turned on a lathe. For custom applications, AZEK Trim products can be laminated and heat formed to create curves. AZEK To Mill offers a true 1 1/4" profile that is perfect for fabrication and OEMs.

AZEK TRIM PRODUCTS

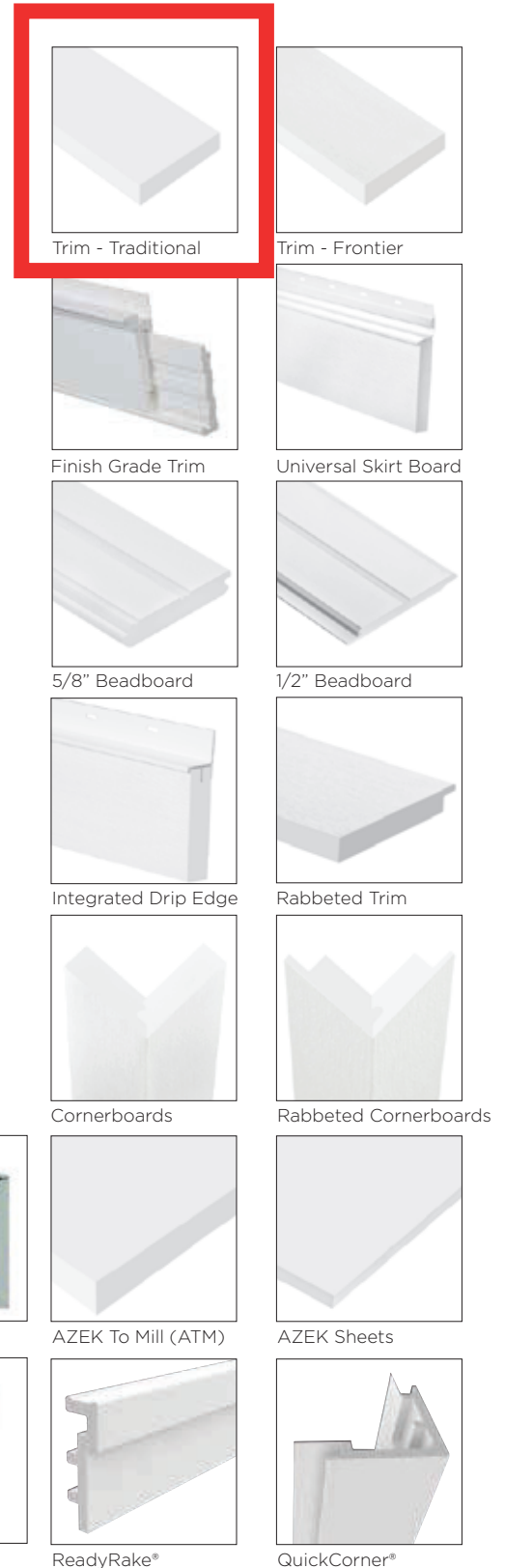
By thickness, width, and length

5/8 TRIM Traditional & Frontier		LENGTHS	
		12'	18'
ACTUAL DIMENSIONS	5/8 x 3 1/2"	•	•
	5/8 x 5 1/2"	•	•
	5/8 x 7 1/4"	•	•
	5/8 x 9 1/4"	•	•
	5/8 x 11 1/4"	•	•
	5/8 x 15 1/4"	•	•

4/4 TRIM Traditional & Frontier		LENGTHS	
		12'	18'
NOMINAL DIMENSIONS	1 x 2		•
	1 x 4	•	•
	1 x 5	•	•
	1 x 6	•	•
	1 x 8	•	•
	1 x 10	•	•
	1 x 12	•	•
	1 x 16	•	•

READY RAKE®	LENGTH
1 x 3 on 1 x 8	18'

QUICK CORNER®	LENGTH
6 x 6 corner with 13/16 J-Channel	20'





AZEK TRIM | #1 BRAND OF TRIM

Offering the unequalled combination of Uniformity, Durability, Workability and Beauty, AZEK Trim looks and feels like real wood, yet requires low maintenance to provide lasting curb appeal. Using traditional tools and fasteners,

5/4 TRIM Traditional & Frontier		LENGTHS		
		12'	18'	20'
NOMINAL DIMENSIONS	5/4 x 4	•	•	•
	5/4 x 5	•	•	•
	5/4 x 6	•	•	•
	5/4 x 8	•	•	•
	5/4 x 10	•	•	•
	5/4 x 12	•	•	•
	5/4 x 16	•	•	•

SHEET Traditional Only		LENGTHS				
		8'	10'	12'	18'	20'
ACTUAL DIMENSIONS	3/8" x 4'	•	•			
	1/2" x 4'	•	•			
	5/8" x 4'	•	•		•	
	3/4" x 4'	•	•	•	•	
	1" x 4'	•	•	•		•

6/4 TRIM Frontier Only		LENGTH
		20'
NOMINAL DIMENSIONS	6/4 x 4	•
	6/4 x 6	•
	6/4 x 8	•
	6/4 x 10	•
	6/4 x 12	•

CORNERBOARD Traditional & Frontier		LENGTHS	
		10'	20'
NOMINAL DIMENSIONS	5/4 x 4 x 4	•	•
	5/4 x 6 x 6	•	•
	6/4 x 4 x 4	•	
	6/4 x 6 x 6	•	

UNIVERSAL SKIRT BOARD Traditional & Frontier		LENGTH
		18'
NOMINAL DIMENSIONS	5/4 x 6	•
	5/4 x 8	•
	5/4 x 10	•

5/4 RABBETED TRIM Traditional & Frontier		LENGTH
		18'
NOMINAL DIMENSIONS	5/4 x 4	•
	5/4 x 6	•
	5/4 x 8	•

RABBETED CORNERBOARD Traditional & Frontier		LENGTHS	
		10'	20'
NOMINAL DIMENSIONS	5/4 x 4 x 4	•	•
	5/4 x 6 x 6	•	•
	5/4 x 8 x 8 (Trad only)	•	•

BEADBOARD		LENGTH
		18'
NOMINAL DIMENSIONS	5/8" x 3 1/2"	•
	1/2" x 5 1/2"	•

AZEK TO MILL (ATM)		LENGTHS	
		8'	18'
NOMINAL DIMENSIONS	1 1/4" x 9 1/4"		•
	1 1/4" x 48"	•	

FINISH GRADE TRIM Traditional		LENGTH
		18'
NOMINAL DIMENSIONS	6/4 x 4	•
	6/4 x 6	•
	3" x 3" Mitre Key Corner Reinforcement	

INTEGRATED DRIP EDGE Traditional & Frontier		LENGTH
		18'
NOMINAL DIMENSIONS	5/4 x 4	•
	5/4 x 6	•

COLUMN WRAP Traditional		LENGTH
		10'
NOMINAL DIMENSIONS	4 x 4	•
	6 x 6	•
	8 x 8	•

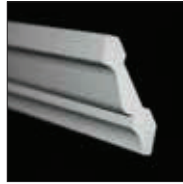
AZEK ADHESIVE	
BOTTLE SIZE	4 oz.
	8 oz.
	16 oz.
	32 oz.
	128 oz.
	5 gal.



AZEK MOULDING | THE LOOK AND FEEL OF AZEK TRIM

High performing wood replacement mouldings available in a variety of profiles. A perfect match to AZEK Trim, AZEK Mouldings are known for longevity and durability. They won't split or rot and can be installed using traditional tools and fasteners.

AZEK Mouldings - Most can be heat formed to create curved moulding details.



3" Crown



4" Crown



5" Crown



6" Crown

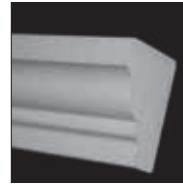


8" Crown

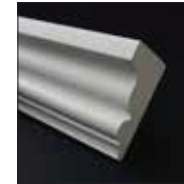
MOULDING PROFILES	SIZES
3" Crown	9/16" x 2 3/4" x 16'
4" Crown	9/16" x 3 5/8" x 16'
5" Crown	1 1/16" x 4 5/8" x 16'
6" Crown	1 1/16" x 5 1/4" x 16'
8" Crown	1" x 7 1/2" x 16'
Cove Moulding	3/4" x 4 1/4" x 16'
Rams Crown	1 13/32" x 2 1/16" x 16'
Imperial/Rake Crown	1 3/8" x 2 3/4" x 16'
Bed Moulding	9/16" x 1 3/4" x 16'
3 1/2" Bed Moulding	1 3/16" x 3 1/2" x 16'
Scotia	3/4" x 3/4" x 16'
Quarter Round	3/4" x 3/4" x 16'
Shingle Mould	1 1/16" x 1 5/8" x 16'
Band Moulding	1 1/16" x 1 5/8" x 16'
Wainscot Cap	1" x 2 1/4" x 16'
Base Cap	1 1/16" x 1 1/8" x 16'
Brick Mould	1 1/4" x 2" x 17' 1 1/4" x 2" x 18' (full units only)
Back Band	1 11/32" x 1 3/16" x 16'
Rake Moulding	1 1/16" x 2" x 16'
Adams Casing	1 1/16" x 3 1/2" x 16'
Colonial Base Cap	3/4" x 5 1/4" x 16'
Fluted/Reeded Casing	1 5/16" x 5 1/4" x 16'
Crosshead Pediment	2 13/32" x 7 1/8" x 18' - w/flange 2 13/32" x 6 1/8" x 18' - w/o flange
1 1/2" Square	1 1/2" x 1 1/2" x 12'
Drip Cap	1 1/16" x 1 5/8" x 16'
Water Table	2 3/4" x 2" x 18'
Historic Sill	1 3/4" x 2 1/32" x 16'
Sub Sill Nose	1 17/32" x 1 1/2" x 1 3/8" x 16'
Garage Door Thermostop	7/8" x 2" x 7', 9', & 16'



Cove Moulding



Rams Crown



Imperial/Rake Crown



Bed Moulding



3 1/2" Bed Moulding



Scotia



Quarter Round



Shingle Mould



Band Moulding



Wainscot Cap



Base Cap



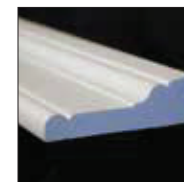
Brick Mould



Back Band



Rake Moulding



Adams Casing



Colonial Base Cap



Fluted Reeded Casing



Crosshead Pediment



1 1/2" Square Profile



Drip Cap



Water Table



Historic Sill



Sub Sill Nose



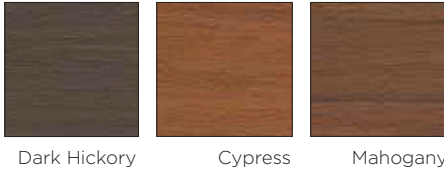
Garage Door Thermostop



AZEK DECK | #1 BRAND OF CAPPED POLYMER DECK

Resists stains, scratches and splits for a smart and beautiful low maintenance deck. Available in 14 colors and several grains to suit any taste and complement any exterior.

Vintage Collection®



Dark Hickory Cypress Mahogany

Arbor Collection®



Hazelwood™ NEW! Acacia® NEW! Morado® Silver Oak® Mountain Redwood™ Brazilian Walnut

Harvest Collection®



NEW! Kona® Slate Gray Brownstone Island Oak™ Autumn Chestnut™



DECK PRODUCTS	Square Shouldered Lengths			Grooved Lengths			Fascia 1/2" x 11 3/4"
All Deck Boards 1" x 5 1/2"	12'	16'	20'	12'	16'	20'	12'
Harvest Collection® (New Kona®)	•	•	•				•
Harvest Collection® (Brownstone & Slate Gray)	•	•	•	•	•	•	•
Harvest Collection® (Island Oak™ & Autumn Chestnut)		•	•	•	•	•	•
Arbor Collection® (Silver Oak®, Hazelwood®, New Acacia®, New Morado®, Brazilian Walnut, Mountain Redwood™)		•	•	•	•	•	•
Vintage Collection® (Dark Hickory, Cypress, Mahogany)		•	•	•	•	•	•



AZEK PORCH | TRADITIONAL LOOK, LOW MAINTENANCE

Available in five popular shades, offers stain and scratch resistance in a traditional tongue and groove board.

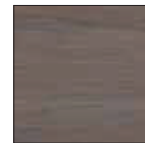
PORCH PRODUCTS	Lengths		
All Porch Boards 1" x 3 1/8"	10'	12'	16'
Brownstone	•	•	•
Slate Gray	•	•	•
Morado®		•	•
Silver Oak®		•	•
Oyster®		•	•



Porch Board



Morado®



Silver Oak®



Oyster®



Brownstone



Slate Gray



AZEK FASTENING | REDUCE HARDWARE VISIBILITY

AZEK offers a variety of fastening options that are either completely hidden from view or color matched to minimize the visibility as much as possible for a clean overall look.

FUSIONLoc™



FUSIONLoc™ Grooved Profiles Only	CONTENTS	COVERAGE
225 sq. ft. box	400 clips, fasteners, 1 bit	225 sq. ft.
450 sq. ft. box	800 clips, fasteners, 1 bit	450 sq. ft.

CONCEALoc™



CONCEALoc™ HIDDEN FASTENERS Grooved Profiles Only	CONTENTS	COVERAGE
Retail Cartons	175 Fasteners 184 Screws Drive Bit	100 sq. ft.
Gun Pail	900 Fasteners with Collated Pneumatic Screws	500 sq. ft.
Bulk Bucket	1,750 Fasteners	1,000 sq. ft.

CORTEX®



CORTEX®	CONTENTS	
	100 sq. ft.	300 sq. ft.
Harvest, Arbor, and Vintage	•	•

*Available through FastenMaster



AZEK RAIL | BEAUTY, STRENGTH, AND LASTING DURABILITY

AZEK Rail offers the look and feel of wood coupled with high durability and low maintenance.

Premier Rail

Reserve Rail

Trademark Rail



Slate Gray



Brownstone



Kona®



Black



White



White



White

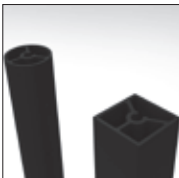
Impression Rail



Black



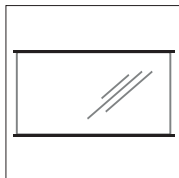
Composite Baluster



Aluminum Round & Square Balusters



Cable



Glass Kit
Glass not included



Top and Support Rail
(Premier)



Top and Support Rail
(Reserve)



Top and Support Rail
(Trademark)



5.5 x 5.5 Post



6 x 6 Post



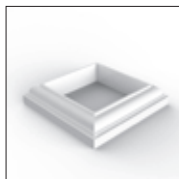
Secure Mount Post



Pyramid Cap



Island Cap



Post Skirt



Lighted Island Cap



Post Cap Module



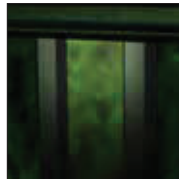
Riser Light



In-Deck Light



Accent Light



Under Rail Light



ADA Hand Rail and
Accessories



Example of ADA
Accessory Items

AZEK Rail is available in four distinct profiles:

AZEK Premier

The classic Victorian railing.

Colors include:

- White
- Brownstone
- Slate Gray
- Kona®
- Black

AZEK Trademark

Colonial look that works well with any housing style.

Available in White.

AZEK Reserve

Generously sized railing that offers a luxurious look and feel. Available in White.

Impression Rail - Dual Branded

Classic aluminum railing that provides unobstructed views and easy installation



AZEK RAIL | BEAUTY, STRENGTH, AND LASTING DURABILITY

AZEK Rail offers the look and feel of wood coupled with high durability and low maintenance.

PREMIER RAIL Available in White, Black, Brownstone, Slate Gray, Kona®	LENGTHS		
	6'	8'	10'*
Rail Pack	•	•	•
Custom Rail Pack	•	•	•
36" and 42" Rail Kits (White Only)	•	•	•

TRADEMARK RAIL Available in White	LENGTHS		
	6'	8'	10'
Rail Pack	•	•	•
Custom Rail Pack	•	•	•
36" and 42" Rail Kits	•	•	•

RESERVE RAIL KITS Available in White	LENGTHS				
	6'	8'	10'	12'	16'
Rail Pack	•	•	•		
5 1/2" Top Rail	•	•	•	•	•

IMPRESSION RAIL Available in Black	LENGTHS		
	6'	8'	10'
Level Rail Kit 36"	•	•	•
Stair Rail Kit 36"		•	
Level Rail Kit 42"	•	•	•
Stair Rail Kit 42"		•	

IMPRESSION RAIL POST KITS With Cap and Skirt	LEVEL RAIL HEIGHTS	
	36"	42"
Post Kit 2" x 2" x 37"	•	
Post Kit 3" x 3" x 38"	•	
Post Kit 2" x 2" x 43"		•
Post Kit 2" x 2" x 54"		•
Post Kit 3" x 3" x 44"		•
Post Kit 3" x 3" x 54"		•
Over the Post Level Rail 2" x 2"	•	
Over the Post Stair Rail 2" x 2"	•	

UNIVERSAL GATE KITS Premier & Trademark Rail	Height
White	•
Black	•

LIGHTING ACCESSORIES
5.5" LED Post Cap Light
Riser Light
Accent Light
In-Deck Light
Under-Rail Light
Transformer (12V, 100W)
100 Ft Wire 16/2
Wire Guides

ADA HANDRAIL & ACCESSORIES All AZEK Rail Profiles
1.5" Dia. Straight Rail, 104" Length
Handrail Bracket
Straight Joiner
Adjustable Joiner
Straight Wall Return
Post Return
90 Degree Corner
90 Degree Inside Corner Bracket
Wall Return with Cover Plate
Joint Rings
End Loop
Rail End Caps

* Only available in Black and White



AZEK RAIL | BEAUTY, STRENGTH, AND LASTING DURABILITY

AZEK Rail offers the look and feel of wood coupled with high durability and low maintenance.

UNIVERSAL PARTS

For Premier, Trademark and Reserve

POST SLEEVES	LENGTHS			
	39"	54"	108"	144"
5.5 x 5.5 Post Sleeve - White	•	•		•
5.5 x 5.5 Post Sleeve - Black	•	•		•
5.5 x 5.5 Post Sleeve - Brownstone	•	•		•
5.5 x 5.5 Post Sleeve - Slate Gray	•	•		•
5.5 x 5.5 Post Sleeve - Kona®	•	•		•
4 x 4 Post Sleeve - White	•			
6 x 6 Post Sleeve - White			•	

ACCESSORIES	COLORS				
	White	Black	Brownstone	Slate Gray	Kona®
4 x 4 Post Skirt	•				
5.5 x 5.5 Pyramid Cap	•	•	•	•	•
5.5 x 5.5 Island Cap	•	•	•	•	•
5.5 x 5.5 Post Skirt - 1 Pc	•	•	•	•	•
6 x 6 Island Cap	•				
6 x 6 Post Skirt - 2 Pc	•				
5.5 x 5.5 Lighted Island Cap	•	•	•	•	•

HARDWARE
Universal Hardware Kit
Baluster Fastener Kit

SECURE MOUNT POST
4" Post
6" Post Attachment
Deck Mounting Kit

GLASS	COLORS	
	White	Black
6' Glass Channel	•	•

ALUMINUM BALUSTERS (20/Pack)
42" - Straight*
42" - Stair
36" - Straight*
36" - Stair

BALUSTERS* (18/pack)	LENGTHS	
	36"	42"
White	•	•
Black	•	•
Brownstone	•	•
Slate Gray	•	•
Kona®	•	•
Reserve White	•	•

CABLERAIL
100' Stainless Steel Cable
500' Stainless Steel Cable
36" Hardware Kit
42" Hardware Kit
36" Intermediate Baluster
42" Intermediate Baluster
36" Stair Intermediate Baluster
42" Stair Intermediate Baluster
Accessory Kit
Cable Cutters
Protector Sleeves (Pack of 20)

UNIVERSAL PARTS

Impression Rail

ACCESSORIES	SIZES				
	45"	22 1/2"	4"	2"	3"
Level Rail Bracket Kit (set of 4)	•	•			
Level Rail Site Cut Bracket Kit (set of 4)			•		
Fixed Stair Rail Bracket Kit (set of 4)					
Adjustable Stair Rail Bracket Kit (set of 4)					
Fastener Kit for Composite Posts and Top Rails					
Installation Tool					
Touch Up Paint					
Mounting Plate				•	•

* Also available in heights to provide a less than 2" gap from deck surface to bottom rail.

SS-AZEK PRODUCT LINE



AZEK PAVERS | PAVERS, REINVENTED

Combining recycled materials with cutting-edge technology, AZEK Pavers are the most advanced segmented paving system in the world.



Redwood



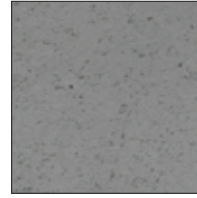
Boardwalk



Olive



Village



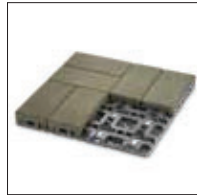
Waterwheel



Standard Pavers/Grid



Permeable Pavers/Grid



Resurfacing Pavers/Grid



Close-up of Grid

Engineered to resist cracking and staining, AZEK Pavers provide long lasting good looks and are guaranteed for life not to crack under normal use (residential applications only).

AZEK Pavers use a patented grid system that dramatically reduces installation time and takes the frustration and difficulty out of manually setting and aligning heavy concrete pavers. AZEK Pavers are perfect for projects such as:

- Patios and Walkways
- Driveways and Parking Lots
- Resurfacing Decks and Patios
- Flat Roof Applications
- Commercial Projects
- Storm Water Management

Made from up to 95% recycled materials, AZEK Pavers help projects earn LEED certification easier than any other pavement. AZEK Pavers outperform other pavers in LEED contribution, such as concrete pavers with fly ash, by more than 10 times.



Standard Soldier Wedge Paver



Standard Soldier Full Paver



Resurfacing Transitional Paver



Resurfacing Bullnose Paver



Shown:
Standard 8x8 Paver, Standard 4x8 Paver
and Standard 4x4 Paver on Grid

PAVER PRODUCTS	STANDARD 2.38" height	RESURFACING 1.75" height	PERMEABLE 2.38" height	COLOR OPTIONS				
				Redwood	Boardwalk	Olive	Village	Waterwheel
4" x 8"	•	•	•	•	•	•	•	•
8" x 8"	•	•		•	•	•	•*	•
4" x 4"	•	•		•	•	•	•*	•
Bullnose Paver		•		•	•	•	•	•
Transition Paver		•		•	•			•
Soldier Course Wedge	•			•				•
Soldier Course Full	•			•				•
EnkaDrain 3801 Drainage Mat								

* 8"x 8" and 4"x 4" Resurfacing Pavers are not available in Village

Grids are 16"x 16"

All photos are for display purposes only and not for the purpose of validating the suitability or safety of any particular installation or application of the product. Always consult AZEK's Installation Instructions as well as local building codes to ensure proper installation.

Pella® Lifestyle Series Double-Hung

Aluminum EnduraClad® Exterior

Detailed Product Description

Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine.
- Exterior surfaces are clad with aluminum.
- Components are assembled with screws, staples and concealed corner locks.
- Overall frame depth is 5" (127 mm) for a wall depth of 3-11/16" (94 mm).
- Jamb liner shall be high-impact polyvinyl chloride backed by continuous hard-tempered aluminum springs.
- Optional factory applied jamb extensions are available.
- Optional factory installed fold-out installation fins with flexible fin corners.
- Optional factory-applied EnduraClad® exterior trim.

Sash

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine.
- Exterior surfaces are clad with aluminum, lap-jointed and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 1-5/8" (41 mm).
- Sashes tilt for easy cleaning.

Weatherstripping

- Foam with 3 mm skin at head and bottom rail. Thermal-plastic elastomer bulb with slip-coating set into upper sash for tight contact at check rail.
- Secondary polyvinyl chloride leaf-type weatherstrip on bottom sash at sill.
- Jamb liner to seal against sides of sash.

Glazing System

- Quality float glass complying with ASTM C 1036.
- High altitude glazing available.
- Silicone groove-glazed 11/16" [obscure] dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort] [NaturalSun Low-E] with argon]].

Exterior

- Exterior aluminum surfaces are finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
 - Color is [White] [Tan] [Putty] [Brown] [Poplar White] [Portobello] [Hartford Green] [Morning Sky Gray] [Brick Red] [Black].

Interior

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen] [Bright White] [stain₁]].

Hardware

- Galvanized block-and-tackle balances are connected to sash with a polyester cord and concealed within the frame.
- Factory installed self-aligning surface-mounted sash lock. Two sash locks on units with frame width 33-1/4" and greater.
- Optional Sash lift furnished for field installation. Two lifts on units with frame width 33-1/4" and greater.
- Finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Oil-Rubbed Bronze] [Satin Nickel].
- Champagne locks are standard on unfinished units; White locks are standard on factory prefinished white units.

Optional Products

Grilles

- Simulated-Divided-Light [with optional spacer]
 - ♣ 7/8" Grilles permanently bonded to the interior and exterior of glass.
 - ♣ Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - ♣ Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain₁]]. Exterior grilles to match the exterior cladding color.
 - ♣ Available only on units glazed with Low-E insulated glass with argon.

– or –
- Grilles-Between-the-Glass₂
 - ♣ Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - ♣ Patterns are [Traditional] [9-Lite Prairie] [Top Row] [Custom – Equally Divided].
 - ♣ Interior color is [White] [Ivory] [Tan₃] [Brickstone] [Black] [Putty₃] [Brown₃] [Harvest] [Cordovan].
 - ♣ Exterior color [matched to the exterior cladding color] [White]₄.

– or –
- Roomside Removable Grilles
 - ♣ 3/4" [Traditional] [Custom – Equally Divided] removable solid pine wood bars steel-pinned at joints and fitted to sash with steel clips and tacks.
 - ♣ Interior [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain₁]].
 - ♣ Exterior [unfinished, ready for site finishing] [factory primed] [factory prefinished, finish color matched to exterior cladding] [White] ₄.

Screens

- InView™ screens
 - ♣ Full-size Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - ♣ Screen frame finish is baked enamel, color to match window cladding.

– or –
- Vivid View® screens
 - ♣ Full-size PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - ♣ Screen frame finish is baked enamel, color to match window cladding.

Hardware

- Optional factory applied limited opening device available for vent units in steel, nominal 3-3/4" opening.
- Optional window opening control device available for field installation. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

Sensors

- Optional factory installed integrated security sensors available in vent units.

- (1) Contact your local Pella sales representative for current designs and color options.
- (2) Available on units glazed with Low-E insulated glass with argon, and obscure insulated glass.
- (3) Tan, brown and putty Interior GBG colors are available only with matching interior and exterior colors.
- (4) Appearance of exterior grille color will vary depending on Low-E coating on glass.